CHILD
DEVELOPMENT

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CHILD DEVELOPMENT: A GENERATION OF RESEARCH [1]

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The primary aim of the National Academy of Sciences—National Research Council is to bring together those scientists of the country most competent to deal both with specific scientific problems and to survey the larger possibilities of science. The effectiveness of the organization depends on the willing participation of these scientists who give generously of their time and effort without financial compensation.

Child Development is one of the many areas which has been explored in this way, and the Society for Research in Child Development (hereinafter designated SRCD) emerged from the National Research Council, the active agent of the National Academy of Sciences, through its Division of Anthropology and Psychology. [3]

This division was organized October 20, 1919. One month after its organizational meeting the division chairman, Walter V. Bingham, received a letter from Dr. Henry S. Bernton, Director of the Child Welfare Association. Incorporated in 1914, this association was established in Washington, D.C. in 1901 as a private charity known as the Washington Diet Kitchen. Congress had appropriated $15,000 in support of the work of this association and in his letter Dr. Bernton suggested possible cooperation of the Research Council to organize some plans for the scientific investigation of children. While such research could not be wholly supported by the association, it offered the use of a small laboratory for use by interested researchers. It appears that Charles B. Davenport (then of the Eugenics Office of the Carnegie Institution of Washington) undertook some anthropometric studies of infants and children of pre-school age in this laboratory, and John B. Watson (then of The Johns Hopkins University) made some studies on the instincts of infants. So much for the background.

At the second meeting of the division in April 1920 a resolution was passed which recognized the pressing need of the scientific investigation of basic facts and principles in the field of child welfare and a committee on

child welfare was created to advise the Child Welfare Association and similar organizations. Walter V. Bingham was appointed committee chairman and its members were S. I. Franz and C. E. Seashore.

The following January (1921) a conference joint with the Division of Medical Sciences of NRC was held to consider proposals made by the Child Welfare and the Women's Welfare Associations. The U.S. Children's Bureau, the Office of Home Economics, and the Junior Division of the U.S. Employment Service were represented at this conference. As a result, resolutions were adopted which recognized the great need of correct information about the principles involved in the conservation and improvement of child life, as well as the health and efficiency of women; and hope was expressed that financial support might be found to inaugurate certain investigations.

Because it lacked financial support, the committee on Child Welfare remained relatively quiescent until 1924, other than to plan for a cooperative exhibit between NRC and the Child Welfare Division of the Sesqui-Centennial Exposition in Philadelphia, 1925-1926. Then on January 15, 1924, a conference was held to discuss the intensive investigation of the mental and physical development of the child from birth to two years of age, and a project was planned based on an expected grant from the Laura Spelman Rockefeller Memorial.

As an approach to the problem R. S. Woodworth, then chairman of the Division of Anthropology and Psychology, had prepared a questionnaire designed to seek guidance from investigators already at work in the field of child development. These questionnaires were sent to over twelve hundred members of scientific societies and somewhat more than one-fourth were returned. One hundred twenty-one scientists reported themselves as being engaged in the study of some problem related to the early physical or mental development of the individual, human or animal. Over half of those reporting were psychologists, and the next largest group (slightly under 25 per cent) were physiologists and physiological chemists. Seven per cent of the total were anatomists and embryologists, and a like percentage distributed between anthropologists and zoologists. The rest were scattered.

There had been almost complete agreement on the desirability of a comprehensive abstracting or reviewing service but none of the government agencies concerned in one way or another with the child was actually in a position to undertake either the proposed abstracting service or the organization of a child research institute.

To prepare for its broader activities the name of the committee was changed to Child Development in 1925. Bird T. Baldwin was appointed chairman and John E. Anderson and R. S. Woodworth members.

Supported by a grant from the Laura Spelman Rockefeller Memorial another conference was held in Bronxville, New York in October 1925.

Specialists in this country and in Canada interested in hygiene, growth, physiology, nutrition, anthropometry, and psychology were invited. In opening the conference R. S. Woodworth outlined briefly the functions of the National Research Council:

> The National Research Council, as its name implies, aims to uphold the ideal of research throughout the Nation. It aims to stimulate and facilitate research. Adopting a military phrase, we may say that it aims to mobilize the scientific workers of the country for an attack upon fundamental problems. It does not aim to dominate the scientific workers of the country, nor prescribe what they shall do and what leave undone. Rather, it aims to be representative of these workers. It is they who must decide what shall be done, and how it can best be done. It is they who must stimulate one another to more energetic and better focused effort, and it is they who, by mutual give and take, must be relied on to maintain and raise the standards of research. Such success—not inconsiderable, indeed—as the National Research Council has enjoyed, has arisen from two causes. First, as a national body representative of the various sciences and of all sections of the country, its judgment and support have carried weight and made possible the initiation of important enterprises which would otherwise have languished from lack of sufficient backing. Second, it has been able to assemble groups of scientific workers, often small groups of those working on specific problems, and by establishing effective contact between them, increase markedly the productivity of the groups and the progress of the questions at issue toward solution.

One of the conclusions of the conference was that most universities did not provide adequate training for workers in the field of child development and so it was recommended that a special committee be established to consider the type and how much training should be required for workers in the field of mental hygiene of young children as well as for those directing and organizing such work.

Beginning April 1, 1926, the Laura Spelman Rockefeller Memorial pledged an annual appropriation of $10,000 for four years to support the work of the committee on Child Development. The committee also served as an advisory body to the Memorial in its awards of scholarships and fellowships in child study and parent education.

During that year the larger part of the work of the committee was to coordinate the studies of about forty graduate students, mostly women, working in universities upon problems of the mental and physical development of the young child. By 1929 one hundred sixteen fellowships and scholarship appointments had been made, fourteen of which were of fellowship grade, from well over five hundred applications. But with the reorganization of the Laura Spelman Rockefeller Memorial and concomitant changes in policy relating to such awards the committee discontinued its formal advisory activities in this area.

Under committee auspices a directory of research in child development was published (*Reprint and Circular Series,* NRC, No. 76, 1927) and

starting with seven scientific journals a continuing abstract service was inaugurated, the first mimeographed number appearing in June 1927. Plans were underway to issue six rather than three Abstracts a year, and in 1929 planographing of the publication was begun.

The need for a journal was apparent by 1930 but publication was postponed because of material published by The White House Conference on Child Development. Three years later, however, a series of resumes of unpublished research was added to the Abstracts (Vol VII, No. 2). Despite the economic depression the mailing list of Abstracts and Bibliography was being maintained and in 1932 the committee reported that since 1928 $8,810 had been received from the sale of this publication. Together with funds remaining from the original grant, this amount of money enabled the committee to continue publication.

In May 1929 a 3rd Conference on Child Development had been held in Toronto with a membership of forty-seven, and in June 1933 a 4th conference marked the organization meeting of the Society for Research in Child Development. Like all NRC committees, the committee on Child Development did not constitute a perpetual organization but could well serve as sponsor for a permanent society of individual research workers. The committee obtained a grant from the General Education Board ($6,300 a year for two years to end June 30, 1935) to aid it in establishing a national society, and officers of the society were invited to make use of the committee's offices in the NAS-NRC building. Space was also provided for the publications office and the funds of the society were administered by the business office of the Academy-Council.

With the expiration of its original grant, the General Education Board made available to the society for the next three years $10,500 for support of an editorial office, and $5,000 as a revolving fund. For the year 1936-1937 the Board made an additional grant of $3,500 a year for three years to continue the publications office and publication of the Abstracts (expecting the society to assume full financial responsibility at the end of that time) and a grant of $5,000 to inaugurate the Monograph series. The first of this series appeared in November 1935 and the society took over from Williams & Wilkins Co., publishers, the editing and publishing of the quarterly journal, *Child Development*. In 1939, however, with the expiration of this additional grant from the General Education Board, the funds of the society consisted mainly of subscription fees which were some $2,000 less than estimated expenditures for that year.[4] By this time research was being diverted mainly to immediate war-time objectives and no financial support was forthcoming for work in child development. Notwithstanding, no dimi-

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[4] It has been pointed out that owing to the situation in the field of child development in its formative years, it was necessarily a secondary field of interest to the majority of members of the society: and it was because of the real interest of the members in the welfare of the child that the publications were supported as well as they were.

nution in society membership took place and by the devoted efforts of officers of the society and members of staff the publications continued.

At the end of 1937 the society listed 400 members and by the end of 1939 membership had increased to 525. In 1940 the society held its last meeting until March 29, 1946, when its meetings were resumed. This meeting, held in St. Louis, was surprisingly well attended despite difficulties of travel and lack of hotel accommodations, and the interest shown both by members and non-members was most gratifying.

Publication costs were rapidly increasing and subscriptions were not meeting the anticipated deficit. The committee obtained a grant in 1947 from the Parents' Institute to hold a meeting in Chicago to discuss this problem, but by the winter of 1948 the financial situation of the society had become critical.

The Division of Anthropology and Psychology recognized the need for immediate action. It obtained a modest grant from the Council and in March 1948 called a meeting of representatives of the NRC, the Division, the Committee, and the Society. The recommendation was that an attempt be made to secure a small grant to take care of the expected publishing deficit by the end of that current year. With the permission of the Academy-Council, George K. Bennett, then vice-chairman of the division, approached the James McKeen Cattell Fund and obtained a grant of $3,000.

In July 1948 the committee met with the officers of the society to discuss publication problems. A joint report was presented in December of the same year which recommended that the publications program should be carried on entirely by the society; that the publication offices in the Council building be closed; and that editorial supervision of the journals be taken over by an editor-in-chief located in a university center that could provide necessary housing. These proposals were accepted by the officers of the Academy - Research Council, and Northwestern University graciously offered the society space for carrying on its publications. Thomas W. Richards, then of Northwestern University, accepted appointment as editor-in-chief of the publications and as business manager of the society. The task of moving the offices was far from simple, but under the personal supervision of Dr. Richards and with the cooperation of the staff of the council, the move was accomplished in a surprisingly short time.

Subsequently the division's committee on Child Development was reorganized with Robert R. Sears as chairman. At the request of the Children's Bureau, Federal Security Agency (now Department of Health, Education and Welfare) the committee met in April 1949 to advise the Bureau on a proposed research program. There was uncertainty how much money Congress would appropriate for a program, and so nine projects, totalling approximately $350,000, were evaluated as to considered priority. The committee's suggestions were accepted and the projects were placed on the budget of the Children's Bureau for the fiscal year 1951.

For many years the U.S. Children's Bureau, through an informal arrangement, aided in many practical ways to ensure the continuance of *Child Development Abstracts and Bibliography*.

In 1951, at the expiration of his three-year term of office, Dr. Sears resigned as chairman of the committee and Dr. Richards was appointed to succeed him. Recently, in 1954, Dr. Alfred L. Baldwin of Cornell University was appointed to serve as chairman until 1957.

Present officers and council of SRCD are: Dr. H. V. Meredith, president; Dr. Celia B. Stendler, secretary; Dr. T. W. Richards, treasurer; Drs. Icie Macy Hoobler, Esther McGinnis, Nancy Bayley, Carroll Palmer, Roger Barker, and Boyd McCandless, council.

Due to lack of funds, the committee has been quiescent for a number of years, but it is recognized there is still much work to be done in the field and it is the desire of the division, and the Academy - Research Council, that the committee remain in existence. In this way does SRCD maintain relationship with the Council's Division of Anthropology and Psychology, even though on an informal basis.

A CRITIQUE OF STUDIES OF INFANT ISOLATION [1]

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During a dozen years of teaching and thinking in the field of child study, one area with which I have been concerned happens to be one in which I have myself carried out no direct, first-hand research; this area concerns the effects on personality development of early experiences, particularly in the first year or two of life. I should like to share with you some of my thinking about certain theoretical and practical implications of one aspect of this field.

The old issues of heredity and environment take on vivid and new significance when one considers, with something of the concreteness of the embryologist, what hereditary potentialities reach expression under which actual circumstances or how varying conditions may reshape or re-phrase specific hereditary potentials. Until recently, the major environmental variable considered was an over-narrow attack on the problem, namely the study of specific training for skills. The experimental contribution in this area two decades ago was the method of co-twin control: treating (or rather, training) identical twins in different ways. By the use of this method it was possible, for example, to bring reality to the concept of developmental readiness, to demonstrate the inefficacy of untimely training and to show the force of the developmental gradient, to show, for example, that just as the growth of grass pushes boulders apart, the developmental impetus in the individual produces walking when the child is ready to walk, even though he has been held down or even wrapped up in the preceding months.

The data of these studies were widely noted, were taken into account in theory building and found widespread practical application. The rate at which early abilities unfolded was believed to be consistent with the rate of later development. In education, the concept of readiness and maturation was widely exploited. Infantile adherence to the developmental time table was used as one guide—but a strict guide—to adoptive placement. From the studies, it appeared (especially as there was a tendency to generalize beyond the types of activities actually studied) that it really mattered very little what one did in the course of the first year, since development, by and large, would take care of itself. Of course it was necessary for parents to see that babies received adequate nutrition, and beyond that it was their obligation to train the infant in such a way that the responses, as they un-

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folded, were made to appear on appropriate rather than inappropriate signal. It was a period of simultaneous excesses both in Watsonian empiricism and Gesellian nativism somehow wrapped together.

Within this structure, so firm and tight that it was virtually sound-proof, it was difficult even to hear the clamorings of the psychoanalysts and such, who seemed to feel that what was done to the child in the first year in terms of the method and the emotional context of, for example, feeding or toilet training, made all kinds of a difference: or that deprivations, for instance, could make major differences in the kinds of personality that resulted and even in the kinds of activity and the rate of their development. A new sort of cultural anthropologist, too, was telling us that experiences of the infant related to differing child care practices in different cultures—even those experiences of the first year—were important. In effect, we had two child psychologies in the field for some period of time. Actually, these two psychologies did not produce the active conflict that might have been expected because they were hardly within the same universe of discourse. The theoretical and practical implications were contradictory, and it has been rather difficult to reconcile, or even to fit together, the child psychology centering around studies of motor development and learning, and the child psychology based on the dynamics of mother-child relationship and the dramas of nursing and toilet training. Even key words take on quite different meanings in the two contexts. For example, when we speak of *emotion* in the one we think of the age at which laughter appears, the specificity of stimuli to smiling or the conditioning of fears; in the other we think of emotional hungers, need for affection or the circumstances which make for insecurity.

If we try not to take sides but rather to find ways of using both kinds of contribution and attempt to move toward a unified child psychology, the determination of the actual significance of events in the first year of life is crucial but tantalizingly inaccessible experimentally—at least within the bounds of ethical and humane research. The occasional accounts of alleged feral children (10) are teasingly suggestive but woefully undependable; reports of anthropologists are difficult to verify and it is almost impossible to pin down wholly comparable reports of different cultures, significant as each report might seem to be.

All such material, however, hints at the permanent nature of damage produced by deprivation of human stimulation in the early years of development. Cases of isolated children, like the cases of feral children, are always unsatisfactory; they are rarely adequately studied and, at best, the question always remains as to whether we are dealing with what would have been in any case a congenitally feeble-minded child. However, I want to discuss briefly two cases reported by Kingsley Davis (4, 5) because they are representative and because they raise an interesting issue. These were neglected illegitimate children cooped up in attics. Anna was a child discovered emaciated and immobile at the age of 5. By the time of her death (from ap-

parently unrelated causes) at the age of 10, she had recovered to the point of plumpness, rather clumsy locomotion, reasonable toilet habits, and limited speech at a near two-year-old level. In short, she gave the picture of a congenitally defective child.

Davis' second case is of a child who was locked up for her first six years. Like Anna, Isabella was the victim of an irate grandfather who could not bear to see the evidences of his daughter's waywardness. This child seemed feeble-minded at first, although her Stanford-Binet mental age of 19 months and her Vineland level of two and one-half years were noticeably superior to Anna's on her emergence from her hiding place. Isabella was systematically trained. In a week she vocalized; in two months she spoke in sentences; in nine months she was reading and writing; in 16 months she had a vocabulary of 2000 words. Now: Davis puzzles over the contrast between Anna and Isabella. Could the systematic training and better care Isabella received after her release account for this? Or (as he finally seems reluctantly impelled to conclude) was Isabella to start with a more competent child? Possibly this is the answer, but I cannot comprehend Davis ignoring a crucial difference between the two children's experiences of isolation, evident from his own account: Isabella's "mother was a deaf mute . . . and it appears that *she and* Isabella had spent most of their time _together_ shut off from the rest of the mother's family." (5, p. 436). (Italics mine). I can only conclude that Davis never alludes to the fact that Isabella's mother shared her "isolation" again because of his assumption that only specific training experiences are relevant. On this assumption, the presence of Isabella's mother would be unimportant because she could not speak to Isabella. But if we are thinking not of specific trainings but of the experience of relationship, do we not have a third solution to Isabella's superior recovery in terms of whatever guesses we can make about the fumblings of this mother towards Isabella in the dark and the silence?

In contrast with such reports of single cases, it was with a great sense of discovery and of the opening of vistas that about eight years ago I came upon René Spitz's exciting studies, with Katherine Wolf and others (21, 22, 23, 24, 25), of the devastation of the developing personality produced by inadequate mothering in the first year of life. Here was a way of dealing with the very essence of the interaction between heredity and environment; here was evidence that social stimulation is itself a biological necessity; here was a chance to determine the basic psychological conditions for the development of human personality; not the effects of specific training but the underlying nurturing conditions without which normal growth, learning and development cannot take place.

In these studies, Spitz showed that healthy, happy babies whose mothers gave them into the care of others for periods of weeks or months in the last half of the first year of life became depressed, weepy and unresponsive —only to recover their earlier bounce and to make up for the lost develop-

mental ground immediately after the mother's return. Even more strikingly, children who had shown above-average levels of development for four or five months, whose mothers then went permanently out of their lives while the children received the best of institutional care, were severely retarded by the age of one year in every measurable aspect of development, were more prone to disease, and incapable of normal human relationships. To cite Spitz's report of the follow-up of 91 children after two years, 27 children of those observed originally had died (although in the control institution in which mothers were present there was not a single death), "in spite of good food and meticulous medical care," some of the other children could no longer be followed as they "were adopted, placed in other institutions or simply lost from sight," of the remaining 21 "only 3 had the normal weight of a 2-year-old, and only 2 attained the length normal at this age. . . . Of these 21 children, of which the youngest was 2½ years old, only 5 could walk unassisted, only 1 had a vocabulary of a dozen words, and only 1, a 4½-year-old, used sentences. On the other hand, 8 of these 21 children could neither stand nor walk, 6 could not talk at all, and 11 were limited to the use of 2 words." (24, p. 13; See also 22). In the simplest terms: developmental quotients which had started at 124 (at about the time the mothers left the children) had declined by the end of the first year to 72; by the end of the second year to 45. In addition to such shattering verbal accounts as these, Dr. Spitz offered his motion pictures (like GRIEF[2]) which are soul-searing in their impact, as one observes the tragic depression of the babies under temporary deprivation or sees the "human wrecks" of children between a year and a year-and-a-half of age who have been without their mothers since they were four months old. In all this, let us add at once, what is at issue is not the presence or absence of the biological mother under ordinary home conditions but the impact of institutional care when the mother is withdrawn and no consistent mothering person substitutes for her.

We owe Spitz a great deal for his ingenuity in taking advantage of existing social circumstances to set up an experiment-like research design. We must be grateful to him, too, for the dispassionate accumulation and reporting of measurements, and their cinematic documentation. We have, however, some cause for complaint (or, perhaps, merely impatience) over the lack, as yet, of measures of dispersion or of concrete hour-by-hour schedule and description of the actual contacts of institution personnel with the children, their methods of feeding the infants, etc. However, it seems appropriate at this point to accept at face value Dr. Spitz's report that the significant variable was the shift from a full-time mother to the equivalent of 1/12 or 1/15 of a mother.

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[2] Film distributed by New York University Film Library. 30 minutes, black and white, silent.

Although Spitz's studies were not the first in the field, and although critics have indicated flaws in his necessarily imperfect quasi-experimental procedures, his studies are nonetheless the most telling and best focused of an entire array of studies which, though made under many different circumstances and in many quarters of the globe, show remarkable convergence. Time does not permit me to do more than mention studies and reports by Levy (15), by Bakwin (1), by Goldfarb (11, 12, 13), by Anna Freud (9), and others. We may summarize them by saying, with Bowlby (in his recent survey of the literature for the World Health Organization) that:

> ... the evidence is now such that it leaves no room for doubt regarding the general proposition—that the prolonged deprivation of the young child of maternal care may have grave and far-reaching effects on his character and so on the whole of his future life (3, p. 46).

I shall also have to limit myself here to the mere mention of the evidence that a degree of deprivation less than that which virtually obliterated Spitz's group seems particularly likely to result in the pattern of incapacity for human relationships which we know as the psychopathic personality (2, 11, 15). I should like, rather, to go on to another statement of Bowlby's which sets the issue for most of the rest of what I wish to say:

> Although it is a proposition exactly similar in form to those regarding the evil after-effects of rubella in foetal life or deprivation of vitamin D in infancy, there is a curious resistance to accepting it. (3, p. 46)

Bowlby speaks of the resistance of psychiatrists: I am more concerned with the resistance of psychologists. I think in both cases the resistance may have been in part on the basis which Bowlby advances:

> Reluctance to accept it is, perhaps, because to do so would involve far-reaching changes in conceptions of human nature and in methods of caring for young children. (3, p. 46)

I infer the resistance from the fact that the work of Spitz and others in this field has scarcely been noted in recent textbooks of child psychology; from the critical and suspicious comments that psychologists make to me informally about this work (in somewhat the tones that experimenters usually reserve for ESP or, perhaps, the Rorschach!) and on a few explicit criticisms.

Admittedly, a major flaw in the work of what I may allude to as the "psychodynamic wing" of child psychology has been the paucity of experimental evidence, the argument from clinical instances, and the great willingness of its proponents, nonetheless, to offer suggestions regarding the desirable emotional climate for child care. Actually the basis for such advice has, I think, been sounder than its critics recognize. For one thing, this is primarily a medically or psychiatrically or clinically oriented group, and it has

been less concerned with marshalling and citing the evidence that a well-trained psychologist can bear. Whatever the reasons, however, there has been in the other wing of child psychology a noticeable impatience with these pronouncements. This impatience, as it bears on the problem of infantile experience, has been eloquently stated with remarkable documentation and justification in Pinneau's (16) breathtakingly complete demolition of Margaret Ribble (17, 18) and all her works. I commend you his article as a kind of hydrogen bomb perfection of destructive criticism; not a paragraph is left standing for miles around. Dr. Ribble, you will recall, is one of the upholders of Mother. Under the label of marasmus she has pointed to phenomena of developmental disruption much like those described by Spitz. In reports based on (largely unshared) clinical observations of 600 infants she finds an innate need for handling by the mother. She observes the helplessness of the newborn infant; she observes periodic mass activity and muscular tension disappearing upon suckling or close contact with the mother and finds, too, that the young infant readily goes into "functional disorganization" (irregular breathing, unstable circulation, and disturbed digestion). She makes, in fact, a number of *descriptive* statements about the appearance and behavior of the unloved baby, whose accuracy is attested by their essential agreement with descriptions by others. However, sheer descriptions are rather difficult to extricate from the physiological theories which Ribble interposes between the fact of maternal deprivation and the fact of disturbed development. We are told, for instance, that there is inadequate and unstable distribution of blood circulation for the first two or three months; that for a similar period the child experiences an inadequate oxygen supply and frequently may suffer from partial suffocation. The disturbed digestion of the baby who is not held in the arms sufficiently is said to be produced by his swallowing air and developing colic. The "tensional states" describe the infant's struggle against a tendency to cerebral anoxia.

Pinneau proceeds to square away at these and other Ribbleian doctrines and proceeds in this connection to demolish the doctrine of Mother as well. In a sustained barrage, drawing with meticulous scholarship on a bibliography of 88 psychological, pediatric, anatomical, physiological, embryological and biochemical sources he utterly disposes of Ribble's physiological explanations. He cites evidence to show that circulation becomes stable and non-foetal in nature within the first day or two of life; he shows that the infant's oxygen supply is superb, that irregularities of breathing are of no import, that respiration is stabilized in the first few days, and that there is no basis for the notion that crying is a response to partial suffocation. With regard to digestion, he marshals reports that all infants swallow air; and completely undercuts Ribble's concept of tension in relation to the danger of neurological "functional disorganization." (Because it is irrelevant to the present discussion, I will omit his material on the relative virtues of breast

and bottle feeding.) With this evidence, Pinneau rejects Ribble's thesis, a thesis that he states in these terms: "that infantile experience is of great importance in directing the development of the infant's personality *because of* instability and inadequate organization of primary body functions." (16, p. 203) (Italics mine.) He rejects her view, above all, that the infant requires a long period of attentive mothering. Now, this is a very serious conclusion. Obviously, it points to the rejection not only of Ribble but of all others who, presumably out of whimsicality or sentimentality, plump for sustained mothering experience. There is every evidence that Pinneau intends just this. He cites with approval, studies in which normal development was shown in infants whose experiences of mothering, in Pinneau's words, "were carried to the opposite extreme."

Here, in the truest sense of the cliche, Pinneau is guilty of "throwing out the baby with the bath." Granted that Ribble's physiological underpinning is of the flimsiest sort, what Pinneau fails to note is its remarkable *irrelevance* to the basic question regarding the need of mothering. Actually, this was long evident and puzzling even to very sympathetic critics of Ribble on child development. For example, Kubie reviewed one of Ribble's books (*The Rights of Infants*) in 1945:

> . . . Its spirit and its purpose is profoundly right. Its emphasis on the importance of the emotional factors in child care from the very moment of birth is sorely needed as a corrective. . . . On the other hand, when one turns to the detailed physiological data which the author adduces to support her thesis, one is troubled. Sometimes the physiology is naive. Often it is dogmatic when it ought to be tentative . . . In fact the whole picture of the relationship of sucking and respiration to anoxic states, though interesting and provocative is hardly the open and shut affair that the author describes. . . . the particular type of interdependence of one on the other which the author describes, making the sucking process and the learning of sucking almost a panacea to all of the infant's struggles may well turn out to be a partial truth. . . . It is somewhat puzzling therefore that from an argument, which both physiologically and psychologically must be characterized as naive, the author arrives at conclusions which in the main one must support with enthusiasm . . . [but whose substantiation] is in the nature of elaborate partially-scientific rationalizations (14, pp. 415-416).

In other words, the fact that Ribble advanced the wrong reasons ("because of instability . . . of primary body functions") for the need for mothering is scarcely justification for discarding observations validated by many others (whom Pinneau does not mention) and to conclude that her basic premise ("infantile experience is of great importance in the development of the infant personality") is wrong. Yet Pinneau's masterful critique has been used to call the entire field into question. As a matter of fact, Pinneau's scholarly care breaks down in what I regard as the crucial last section of his paper which he entitled " 'Mothering' as related to the infant's devel-

opment." With Pinneau, we can applaud a part of Orlansky's sweeping criticism of Ribble:

> It is unfortunate that such an influential writer has not attempted to draw a line between her empirical findings and her personal opinions (as quoted by Pinneau, 16, p. 222).

Yet Pinneau himself has confused the findings on the effects of deprivation with Ribble's rationale for them. The one direct piece of evidence which he cites does *not* deal with deprivation of the sort we are here discussing, and does not deal with "the opposite extreme" of infant care. The studies by Dr. and Mrs. Dennis (6, 7) have been misused by others as well as Pinneau, largely because they were unfortunately named studies of "minimum social stimulation." Recently, in his *Readings in Child Psychology* (8) Dennis has reprinted much of the material of the earlier publications under the happier title of "Development Under Controlled Environmental Conditions." Dennis, of course, was primarily concerned with *restricted practice* of specific activities. (His study enriches our understanding with the concept of autogenous behavior—a term developed to broaden the concept of "instinctive" or "maturational" to include those responses which are, at least to some extent, learned but learned under self-imposed practice.) However, the mischievous phrase *minimum social stimulation* is, after all, in his reports and, what is worse, it has been misused by those who use Dennis second-hand.

Let us see now precisely *how* isolated the infants were; how minimal was their social stimulation—since, for our purposes, the whole story hinges on this. First, we observe that the period of most marked isolation was when we would expect it to be least injurious: after the first six months most restrictions were removed. All the evidence to date from other studies is that the *latter* part of the first year is crucial with respect to damage produced by isolation.

Second, we find that the babies, by Dennis's own statement, "were not 'isolated' " (7, p. 155). Basically, I suppose the trouble was that the Dennises are decent human beings and could not bring themselves to impose restrictions of the sort that are apparently involved in Spitz's study or in the occasional accounts of illegitimate children hidden away in attics. Another trouble was that the Dennises were just too interested in the babies to leave them alone very much. According to their report, the babies were visited on the average of twelve times a day and one, or both, experimenters were in the room during two hours of the day. They also point out that during this period of the first half of the first year all ". . . infants are awake but little longer than is required for feeding, bathing, and dressing." And how much attention did these babies receive? "The subjects were taken from their cribs only for feeding, bathing, cleaning, and dressing *and* for a few experiments." (6, p. 150.) Moreover, "We did not smile at the subjects

nor did we speak to them, romp with them, or tickle them *except* as these actions occasionally were incorporated into routine experiments. We talked to each other when in the nursery *but* did not direct our remarks to the infants." (6, p. 150) (Italics mine.)

> In addition to entrances into the room which were made in order to care for the infants and to experiment with them, several entrances per day were made solely to note down the condition and activities of the babies (7, p. 155).

> When either infant cried insistently, we entered the room and corrected whatever condition seemed to be the cause of the cry. We did not adhere rigidly to the feeding schedule (6, p. 150).

Incidentally, beginning the twenty-seventh week the Dennises allowed themselves to smile back at the twins and to speak to them, and even permitted themselves to fondle and play with them. This was done in such a way as not to reward the performance of any specific act. "We romped with the children, as by shaking or rolling them only when they were indifferently employed with some response that was already well established." (7, p. 152). But this does throw a sidelight on the Dennises' regrettably human responsiveness to the infants.

While the twins did not receive as much actual handling as, say, Ribble would have wished, it seems evident that (unlike the "human wrecks" in Spitz's experiment) the infants did receive enough personal attention from the Dennises to respond to them early as persons. In fact, the observations stress the infants' response to the human face and a number of other specifically personal responses. While it is true that the experimenters did not fondle the babies, I am sure that their bathing, dressing and feeding were not slap-dash. I doubt whether it made much difference to the babies that the Dennises did not address their remarks to them! These restrictions, in fact, are scarcely greater than those in the first six months of the lives of an entire aseptically raised generation of American babies. Nor can I believe that the twins were much affected by the reported absence of pictures, mirrors or elaborate furnishings nor by the restriction that visitors were not to enter unless accompanied by the Dennises! Incidentally, if we are to follow—as I hope we do—the advice of the current edition of the Government's pamphlet on Infant Care, the babies had an advantage over their contemporaries who were raised in accordance with the then current edition: "No elimination training of any kind was undertaken." (7, p. 154)

In one of his articles on the twins Dennis concludes, "The infant within the first year will 'grow up' of his own accord." (6, p. 157) The implication is that this is true even *under conditions of minimum social stimulation.* I think we can accept this statement if we add one word: The infant within the first year will 'grow up' of his own accord under conditions of minimum *adequate* social stimulation. *This* kind of minimum the Dennises obviously supplied and, perhaps, have helped to define.

What is clear, then, is that our experimental task is to address ourselves to detailing and specifying precisely what is *adequate social stimulation* and in what respects it is adequate. Spitz, for one, has made a beginning at partialing out the time factor to show that neglect is most dangerous in the last quarter of the first year. We have some hints that optimum care preceding neglect may make for more severe acute effects and less severe chronic effects. We have some indication from Spitz and from Roudinesco (cited in 3) of the conditions under which recovery of varying extents is possible. We have indications from Anna Freud, Goldfarb, and others that institutional care has particularly pernicious and permanent effects on language and speech development. All in all, there are many indications that, as with embryological tissues, those functions which are most actively developing are most vulnerable to damage from deficiency at that moment. We need to stabilize and confirm this sort of information and we need to extend it much further. For this reason, it is fortunate that the World Health Organization has recognized this as a crucial area of study and that one of the major American university centers for research in child development is now planning to undertake systematic research in this direction. I can think of few areas of research more promising of reward than this. What precisely are the significant ingredients in the mothering relationship? Is it a specifically *humanizing* process, or to what extent is it essential in mammalian development in general? Recent studies of chimpanzees and of goats suggest some extension of this work under controlled conditions with animals. What mothering practices are particularly valuable or particularly harmful at which stages of development, and at which later stages of development will the damage or the benefit be evident (as in Bowlby's teen-aged delinquents)? Here is opportunity for physician, experimental psychologist, clinical psychologist, case worker, and sociologist to join hands in order to arrive at some of the very fundamentals of the influences which shape and misshape human personality.

I should like to add that this is an area in which we are under obligation to foster social applications of our views on personality development while they are yet in the stage of the best guess, responsibly weighed. For the sake of the human lives involved we cannot afford to wait until all the evidence is in, because in the meantime something *is* being done with these lives. At the same time that we are scientifically cautious and critical of our findings and ever eager to revise our views we must cry out against practices which soundly-based hunches suggest to be dangerous to human development and human personality. For example, we know enough already, I think, to insist on the earliest possible adoption of infants. Some adoption agencies now are moving in the direction of such placement and permitting adopted parents to take—as they are usually willing to take—some of the risks of imperfection which natural parents take on the grounds that early family care itself appears to be one of the fundamental safeguards for

normal development. Likewise, we now have good reason to feel that a depressed developmental quotient in a six-month-old infant may not mean poor hereditary equipment; it may reflect deprivation: the absence—not of specific training—but of the basic stimulation by human relationship which appears to be a prerequisite to normal growth. Again, where institutional care is a necessity we know now something of where the dangers of institutionalizations lie and we must encourage (what many hospitals and foundling homes are now doing) the provision of people, in addition to the nurses, who are free to play with and stimulate the infant and young child, and also feel it is a worthy and valuable thing to do.

Perhaps all of this sounds breathlessly new. Of course it is not. Pioneer studies like Ripin's (19) appeared long before those I have cited in detail. In fact, Dennis (7, p. 179) mentions Herodotus' account of an attempt to rear two infants in silence several centuries B.C. I should like to close my own remarks with the account by the historian Salimbene, writing in the 13th Century of the Emperor Frederick II:

> . . . he wanted to find out what kind of speech and what manner of speech children would have when they grew up if they spoke to no one beforehand. So he bade foster mothers and nurses to suckle the children, to bathe and wash them, but in no way to prattle with them, or to speak to them, for he wanted to learn whether they would speak the Hebrew language, which was the oldest, or Greek, or Latin, or Arabic, or perhaps the language of their parents, of whom they had been born. But he laboured in vain because the children all died. For they could not live without the petting and joyful faces and loving words of their foster mothers. And so the songs are called "swaddling songs" which a woman sings while she is rocking the cradle, to put a child to sleep, and without them a child sleeps badly and has no rest (20, p. 366).

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THE MEASUREMENT OF RESPONSIBILITY
IN CHILDREN [1]

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The study of the sense of social responsibility in human affairs seems a particularly appropriate subject, in view of social and political events of recent years, for an interdisciplinary research effort in social science. How this sense develops in children, its correlates, and the crucial age levels, if any, in its organization become of immediate practical concern to educators and parents as well as of theoretical concern to the disciplines interested in child development.

We have attempted to study responsibility in terms of what is expected of the child by his parents and teachers, and by his peers. We began with a number of assumptions and hypotheses. We assumed that responsibility is more an attitude than a knowledge, skill or aptitude. We thought of responsibility as a constellation of attitudes toward work, and toward personal relations in the family and in the community—attitudes which are consistent and imperative and thus serve, with other attitudes, to organize the individual's behavior. Our basic hypothesis was that work experiences in early childhood, adjusted to the maturity and ability levels of the child and including both remunerative tasks and household chores, are significantly correlated with the development of a sense of social responsibility. This is a well-known assumption in the folklore and even the semi-professional literature of child-rearing. Another hypothesis was that a sense of responsibility develops with age, and that proper measurements will show increasing amounts of sense of responsibility in successive age samples of children. Other hypotheses were that various measures of responsibility can be shown to be positively correlated, and that sex and habitat differences are such that rural girls, rural boys, city girls and city boys show, in that order, decreasing amounts of responsibility at any given age, when ability and economic levels are held constant. One can also hypothesize that when work experiences within or outside the home are held constant, the above

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differentials disappear. We have also hypothesized that responsibility will show a positive but not necessarily high correlation with intelligence, and that it is positively correlated with "desirable" personality characteristics.

Our basic sample consisted of more than 3,000 children in rural[2] and town[3] areas of Minnesota, in school grades 4 through 12, and more than one thousand children in the same school grades in a metropolitan center. Our basic instruments consisted of several paper and pencil questionnaires and attitude scales. One criterion measure of responsibility was a Citizenship Scale based on a series of items developed by Gough, McClosky, and Meehl (1), who together with Kenneth Clark and Arnold Rose have constituted a research team in this laboratory for a study of political and social awareness and responsibility in adults. The scale as used in the present study contained 48 items originally selected as differentiating responsible from less responsible groups based on peer judgments in two high schools and one college population. In these preliminary studies, young people were given a definition of responsibility involving willingness to accept the consequences of one's own behavior, dependability, trustworthiness, sense of obligation to the group and to one's own values. An attempt was made to get the youth to think not in terms of leaders but in terms of individuals who always do their part, who are "straight shooters," who inspire confidence in others. Subjects were asked to nominate, using a "Guess-Who" technique, those classmates who closely fitted this description and those who closely fitted an opposite description. A large number of attitude items were submitted to members of such contrasted groups in each of two different high schools and in a population of college fraternity groups. Only those items which satisfied at least a 5 per cent level of significance in *each* of the three separate studies were incorporated into the final scale of 48 items. For the present study the wording of a few of these items was simplified in order to permit older elementary school children to handle them. The items include a few relating to behavior and personality descriptions such as, "I would sneak into a movie if I could do it without being caught," "When someone does me a wrong, I want to pay him back if I can," "In school I am sometimes sent to the principal for being bad," and a good many social attitudes such as, "We ought to let Europe get out of its own mess," "The person who doesn't vote is not a good citizen," "People should not mind paying taxes because it is one of the things we can do for what we get from the community." These items were to be answered on an agree-disagree basis.

Tests were given in group settings, but in 4th, 5th, and 6th grade groups the test administrator read each item aloud to the children, asking them to read it to themselves and to record their answers before proceeding to

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[2] Living on farms or in communities of less than 300.

[3] Communities of from 1000 to 7000 population.

the next item. Test administrators reported uniformly that the children showed a great deal of interest and cooperated excellently.

A second measure of responsibility, called a Teacher Check List, was drawn from the studies on responsibility of adolescents (2) made by the Committee on Human Development of the University of Chicago.[4] This scale presents 28 items to the child's teacher, who is asked to read the items and to check, for a particular child, each statement which is true of him. The items are scaled according to the Thurstone method to represent steps on a continuum of responsibility. Scale values are available for each item, and the median scale value is taken as the child's score. Such items as the following appear in the series—"dawdles at his work," "can never be depended on to complete a job," "is careless about school property," "sees jobs to be done and does them without waiting to be asked." In addition, each child supplied considerable information on a questionnaire having to do with his use of money, his work experience and his home chores and duties.

The statistical reliability of the measures may be expressed in several ways. One sample of approximately 300 children took the same measures a year after the original testing. Retest correlations for these children on the Citizenship Test were of the order of $+.35$ for the boys and $+.52$ for the girls. A second and different group of teachers completed the Teacher Check List for these children one year after the initial rating. Their results correlated with ratings given by teachers of the previous year yielded values of $+.42$ for the boys and $+.32$ for the girls. While these values are low for retest estimates of reliability it must be remembered that a full year intervened between the taking of the two measures; longitudinal measures generally show a sharp falling off of correlation values in time. Mean scores of the two performances do not differ significantly for either measure. A group of fifth and sixth grade children retook the citizenship measure after an interval of two weeks. Correlation values of $+.64$ and $+.88$ for the boys and girls, respectively, resulted. Gough and his colleagues report a split-half correlation of .73 for 221 ninth grade children (1).

Table 1 gives the means and standard deviations of citizenship scores for each age group of boys, separately for urban, town, and rural portions of the sample. Table 2 gives comparable data for girls. An analysis of variance of the data summarized in these tables showed that there is statistically significant variation (beyond the .01 level) among means of age groups, of habitation groups, and between sexes. Older children score higher than younger children, girls score higher than boys, and urban children score above rural children. In terms of standard deviation units, the sex differences are appreciably larger than age or habitation differences, the difference between the means of the sexes being of about the order of half of a standard deviation of the boys' or girls' scores, all ages combined. Care-

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[4] Used by permission of Professor Robert J. Havighurst.

ful inspection of Tables 1 and 2, however, fail to indicate the marked age-group mean differences, expressed as a fraction of the variance of any one age group, which child psychologists frequently find in so-called "personality" materials. If it be objected that, after all, these items were not selected to reveal age differences, it may be added that such has been true for other types of attitude and personality tests, which nevertheless do indicate an age process when applied to widespread age groups of children and adolescents.

TABLE 1

MEANS AND STANDARD DEVIATIONS OF SCORES FOR BOYS ON
"HOW I FEEL ABOUT CITIZENSHIP" TEST

Age Group	RURAL			TOWN			URBAN		
	N	M	S.D.	N	M	S.D.	N	M	S.D.
9	107	24.18	4.60	44	25.14	4.96	37	24.54	4.96
10	142	23.74	5.12	62	24.98	5.20	53	24.98	4.68
11	119	24.34	4.32	70	24.66	4.92	62	26.34	5.00
12	141	24.90	5.00	51	25.98	5.36	50	27.42	4.56
13	109	25.26	4.68	59	23.86	4.56	46	27.22	5.32
14	91	24.18	5.20	52	24.42	5.92	60	26.18	5.32
15	63	24.02	4.84	46	24.98	4.60	51	25.82	4.32
16	60	24.50	4.88	38	24.78	4.68	50	26.38	4.68
17	45	23.62	4.60	44	25.42	5.00	57	26.42	5.44
18 and over ...	17	24.10	3.88	22	24.94	5.84	20	28.10	5.24
Total	894	24.36	4.72	488	24.88	5.02	486	26.26	5.04

TABLE 2

MEANS AND STANDARD DEVIATIONS OF SCORES FOR GIRLS ON
"HOW I FEEL ABOUT CITIZENSHIP" TEST

Age Group	RURAL			TOWN			URBAN		
	N	M	S.D.	N	M	S.D.	N	M	S.D.
9	105	26.54	4.60	67	26.50	3.88	47	26.10	4.12
10	134	26.06	4.52	64	26.58	3.84	51	26.90	4.60
11	108	27.02	4.36	59	26.58	5.32	57	28.22	4.88
12	109	27.22	4.56	81	27.22	5.00	49	29.18	4.96
13	99	26.54	4.48	54	25.50	6.98	46	27.14	5.56
14	75	27.06	4.60	87	28.30	5.12	78	27.86	4.96
15	63	26.50	4.60	71	27.42	4.84	79	28.14	5.72
16	55	27.02	4.92	78	27.26	4.88	56	29.94	3.84
17	42	27.02	5.24	83	29.54	4.08	79	30.14	4.48
18 and over ...	8	27.50	4.48	17	29.74	4.24	16	29.50	3.48
Total	798	26.73	4.52	661	27.41	5.03	558	28.34	4.96

TABLE 3

MEANS AND STANDARD DEVIATIONS OF SCORES FOR BOYS ON "TEACHER CHECK LIST" RATING SCALE

Age Group	RURAL			TOWN			URBAN		
	N	M	S.D.	N	M	S.D.	N	M	S.D.
9	107	57.2	20.8	44	49.3	23.9	37	53.1	23.1
10	142	52.2	22.7	62	59.2	21.6	53	54.6	23.5
11	119	54.9	21.7	70	52.6	22.3	62	55.3	21.8
12	141	56.6	21.1	51	52.8	22.3	50	56.6	22.2
13	109	57.0	20.7	59	59.6	19.6	46	54.8	21.3
14	91	50.8	22.6	52	54.2	24.7	60	58.3	20.2
15	63	51.3	21.4	46	52.4	22.6	51	54.0	22.7
16	60	45.7	21.4	38	58.2	21.2	50	49.4	21.9
17	45	46.6	20.7	44	56.8	21.2	57	53.4	20.3
18 and over ...	17	52.6	21.8	22	60.5	18.5	20	50.5	20.6
Total	894	53.5	21.1	488	55.3	22.0	486	54.4	21.1

TABLE 4

MEANS AND STANDARD DEVIATIONS OF SCORES FOR GIRLS ON "TEACHER CHECK LIST" RATING SCALE

Age Group	RURAL			TOWN			URBAN		
	N	M	S.D.	N	M	S.D.	N	M	S.D.
9	105	65.4	18.8	67	64.6	19.0	47	66.2	20.7
10	134	65.5	19.8	64	61.6	21.1	51	67.0	17.3
11	108	66.0	19.3	59	64.8	19.4	57	65.7	18.6
12	109	65.2	20.6	81	62.7	22.1	49	70.5	10.7
13	99	67.1	16.4	54	68.7	16.8	46	69.6	13.6
14	75	66.3	18.4	87	62.9	20.9	78	69.6	13.9
15	63	64.8	18.2	71	54.2	28.6	79	70.3	13.2
16	55	62.8	20.5	78	55.3	25.8	56	72.3	14.8
17	42	61.7	20.3	83	65.2	19.2	79	62.8	19.5
18 and over ...	8	63.8	22.6	17	56.8	17.6	16	63.8	17.6
Total	798	65.3	19.0	661	61.9	22.0	558	68.0	16.0

By the Co-variance technique, the data summarized in Tables 1 and 2 were re-analyzed. Even when the mean scores of subclasses were adjusted for age differences, the score differences between means of sex groups and of habitation groups remained significantly greater than zero.

Tables 3 and 4 present means and standard deviations of Teacher Check List ratings for each age group of boys and girls, separately for urban, town, and rural portions of the sample. The analysis of variance technique applied to these data indicate that differences between the means of the sexes, and

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between those of habitation groups are significantly greater than zero at the one per cent level, whereas the means of age groups vary sufficiently to satisfy the five per cent criterion, though not the one per cent level. While the interaction variance appeared to be significant here, the breakdown of interaction to test components requires an equalization of subclass numbers which we did not observe. Again in terms of the over-all variation, the sex differences are greater on a gross basis than the rural-urban differences, the sex differences being roughly of the order of half a standard deviation of scores of either sex group, all ages combined. Accustomed to the relatively greater differences one finds among child groups on many personality and attitude characteristics, one is constrained to remark on the *absence* of pronounced trends. The difference between the sexes is perhaps to be expected, as girls commonly have a reputation of greater dependability with teachers. The habitation differences are likewise in line with what is often found in rural as contrasted with urban groups, especially as selective intellectual and social factors are undoubtedly involved. The age trends, while in the desired (and expected) direction, are not as pronounced as are found in many personality and adjustmental features. Indeed, the somewhat lesser evidence for an age trend in this measure is, perhaps, not so unusual; after all, teachers were rendering relative judgments, each to her own group.

Correlation of the two measures produced some interesting results. A set of correlations between each of the measures and several of the face sheet informational items was drawn up separately for the ten-year-old groups and fifteen-year-old groups. The correlations were calculated separately for boys and girls in each of three habitation areas—the urban sample, a rural sample, and a town sample. In general, the correlational matrices are comparable from sample to sample; no consistent differences appear among sex and habitation groups. Each value which appears in Table 5 is the mean of six coefficients, thus combining the data for boys and girls from the three habitation areas. There are small relationships consistently of the order of $+.05$ to $+.20$ between each of the responsibility measures and socio-economic status as indicated by paternal occupation.[5] For socio-economic status as represented by the Sewell Scale (3) the values are slightly higher, $+.22$ to $+.26$. Correlation values between the measures of responsibility are low but consistently positive in the ten-year-old group, whereas in the fifteen-year-old samples correlations between the two measures (except for one group) run consistently higher, suggesting that the characteristic of responsibility may become somewhat more organized as a characteristic as learning processes occur in development, even though mean scores do not show much trend from age to age.

[5] To agree conceptually with relationships understood by the term "positive," the signs have been reversed for the Minnesota Occupational scale, which gives a numerically high value to "low" status.

This study offers a strong argument against several hypotheses which are rather widely held. There appears to be no highly organized trait of responsibility, as such, in childhood, though by mid-adolescence there is evi-

TABLE 5

SUMMARY OF INTERCORRELATIONS, BASED ON TWELVE TABLES OF INTERCORRELATION VALUES, FOR RURAL, TOWN, AND URBAN BOYS AND GIRLS IN TWO AGE GROUPS

Mean values of r are presented*; the values in parentheses indicate the range of r's for the six subgroups

	1 0 Y E A R O L D S ($N = 499$)			
	1	*2*	*3*	*4*
1. *Paternal occupation†*				
2. *SES score‡*	+.14 (−.15 to +.28)			
3. *Number of sibs*	−.11 (−.16 to +.01)	−.23 (−.26 to −.16)		
4. *Citizenship score*	+.15 (+.10 to +.35)	+.22 (+.16 to +.30)	.00 (−.08 to +.05)	
5. *Teachers Check List score*	+.05 (−.06 to +.22)	+.24 (+.03 to +.40)	−.13 (−.29 to −.03)	+.23 (+.04 to +.27)

	1 5 Y E A R O L D S ($N = 366$)			
	1	*2*	*3*	*4*
1. *Paternal occupation†*				
2. *SES score‡*	+.24 (+.04 to +.38)			
3. *Number of sibs*	−.03 (−.16 to +.25)	−.29 (−.38 to −.20)		
4. *Citizenship score*	+.22 (.00 to +.42)	+.26 (+.12 to +.51)	−.12 (−.17 to −.08)	
5. *Teachers Check List score*	+.12 (−.14 to +.25)	+.24 (+.02 to +.36)	−.26 (−.40 to −.16)	+.34 (+.09 to +.45)

* z transformations were not used because so many of the values are close to zero and would change very little.

† The Minnesota Occupational Scale (the signs on this scale were reversed, to permit positive signs to be associated with high status).

‡ Based on the Sewell scale (3) of socio-economic status.

dence that the two measures are beginning to assess something in common, though much of the variance in each cannot be accounted for in terms of the other. While girls are judged as more responsible than boys, the difference is not large on a gross basis. Rural children cannot be said to surpass urban children in the aspects of responsibility herein studied. Furthermore, and perhaps most important, this study reveals little evidence for a marked developmental progress in the child's *amount* of responsibility as expressed in either instrument.

Two possibilities suggest themselves. One is that responsibility as we define it among children gets "set" in early childhood, prior to the intermediate grades. Such characteristics as stability, dependability, conformity, efficiency, and not yielding to self interests, which are encompassed in the term "responsibility" are discriminable in young children and are common features of rating scales and descriptive devices for children. Another possibility is that the characteristic as we ordinarily think of it has meaning only in adult situations, is an emergent in maturity. The only evidence in this paper to suggest such an hypothesis is the consistently greater correlation of the criterion measures at age 15 than at 10. Such an hypothesis is also suggested by the not unusual observation that irresponsible, undependable children who "fail to show their good training" do sometimes settle down and increase in reliability during early maturity. As the widening life space includes experiences which have a greater "reality quality," the individual modifies his behavior along lines provided by basic attitudes laid down in earlier years but never adequately evoked by the less demanding, less urgent quality of the child's life. The child lives at a more "irreal" level and is protected by more powerful persons who can at and do step into his experience to rectify, simplify, and control, and the child knows it. Such is not true for adults, and the child observes that, also. Thus the "demand-quality" of experience may exert a significant influence, to teach attitudes of responsibility. This point of view is also suggested by the child training literature, which frequently holds that jobs and experiences made up for the child in order to provide him desirable training prove to be less useful than tasks and experiences which arise within the child's own motivational context and are relevant to his own interests. Whether home duties and tasks commonly given children have any influence on the child's reputation for responsibility will be investigated in another paper.

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THE RELATIONSHIP OF CHILDREN'S HOME DUTIES
TO AN ATTITUDE OF RESPONSIBILITY [1]

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Advisory literature to parents usually contains the assumption that giving children tasks around the house has merit in training for independence, dependability, or "responsibility," as it is frequently put. These tasks are not infrequently resisted by children; common parental queries have to do with how to get children to accept their duties more willingly. Indeed, children, when asked how they think their parents would like to have them improve their behavior, mention "do my chores" as second or third in a long list of characteristics offered; this is true of boys and girls alike and at all ages from six to fourteen (2).

Another paper by the writers describes the measurement of responsibility in children from nine to eighteen years of age (3). One measure, "Teacher's Check List," was a Thurstone-type rating scale of responsible behaviors applied individually to each child by his classroom or home-room teacher. The other, "How I feel about Citizenship," was a series of attitude items calling for agreement or disagreement and dealing with civic responsibilities of grown-ups, children's obligations with respect to school, and a number of personality and interest characteristics, all found to be valid with respect to reputation with peers and with teachers for responsibility (1). The relationship of home duties to responsibility was studied by a questionnaire entitled "What Are My Jobs," and completed by all children in our sample, somewhat more than 3000 from rural, small town, and urban settings. The "Jobs" questionnaire consisted of three major groupings of items. A number of questions related to the child's income, whether as allowance or in return for duties, and its sources and its distribution by

the child. There were also some questions pertaining to the child's future educational and work plans. A second part contained twenty items relating to personal habits and skills and included such items as:

Do your parents generally have to remind you to brush your teeth?
Do your parents generally have to remind you to wash your hands and face?
Have you ever been on the school patrol?
Have you ever held an office in a school club?
Do you have your own house key?

These items generally reflect maturity and independence of self-management. The final section consisted of 100 specific duties, including 17 that would be found only in a rural environment. The child was asked to mark whether he did the job "frequently," "sometimes," or "never" and for the jobs which he frequently or sometimes did whether he liked or disliked them.

The two attitude measures described earlier constituted our criterion of responsibility. These measures are only slightly intercorrelated; for our

TABLE I

CORRELATION BETWEEN NUMBER OF JOBS IN LIST OF 100 REPORTED AS
"NEVER" DONE, AND SCORE ON TWO MEASURES OF RESPONSIBILITY

	N	Teacher Check List	"How I feel about Citizenship"
10-year-olds:			
Rural girls	127	.02	—.18
Town girls	64	.26	—.09
Urban girls	51	.00	.00
Rural boys	142	.11	—.01
Town boys	62	.22	—.02
Urban boys	53	.04	.28
15-year-olds:			
Rural girls	61	—.20	—.06
Town girls	66	.27	.19
Urban girls	79	.12	.15
Rural boys	63	—.06	—.13
Town boys	46	—.06	.01
Urban boys	51	—.18	—.22 ·
Total rural and town sample ..	2441		
Non farm items only		.09	—.07
Total "never" count		—.01	—.07

entire population of town and rural children ($N = 2441$), the Pearson r was $+.27$, though there was a tendency for r values to be higher for older than for younger children when correlations were computed in different age groups (3).

The relationship to home duties may be expressed in a crude manner by simply counting the number of jobs a child says he "never" does and correlating this "score" with his scores on the criterion measures. This procedure investigates the hypothesis that more responsible children will have smaller "never" counts on the job questionnaire. Results of such an analysis appear in Table 1 for several selected age and sex groups and for the total rural and small town population. Results certainly cannot be used to support the hypothesis that the number of home duties assumed by a child bears a substantial relation to his sense of responsibility, at least as measured in this study. Nor is there any evidence that this relationship may exist in older children, after more years of family training.

The relationship of home experiences to responsibility was further investigated by an item analysis of the home duties questionnaire, on the supposition that the very crude measure used in the correlational study might obscure certain more specific relationships. Criterion groups were constituted by selecting individuals from deviate quarters of the score distributions for both criterion measures, using the correlation scattergrams between both measures. These groups were so drawn that the fourth of the children highest on both measures together and the fourth lowest on both measures together were utilized. It is obvious, of course, that the selection was based on an inspection of correlation scattergrams which did not show a great coincidence of the regression lines. These samples were selected with cognizance of the fact that a sex difference exists between boys and girls on both measures of responsibility, particularly on the teacher's rating. The samples were adjusted to equalize the sex representation on the selected deviate groups. Significance of differences between proportions of each group responding to each item were calculated.

Again the results are negative. Results were kept separate for boys and girls. For boys, five tasks differentiated between most and least responsible at the five per cent level of significance in terms of doing the task or not. Fourteen items differentiated on the basis of whether those reporting the item stated they liked to do it. Generally, the more responsible boys more often liked to do the work, though they were not actually more likely to do the task. For girls, eight items differentiated high and low responsibility subjects as to performance but only six items on a liking basis. These items are listed in Tables 2 and 3. Actually, the *number* of "significant" differences reported in the tables itself falls within chance expectation.

While no differences were found between most and least responsible children with regard to source or expenditure of personal income, responsible children, both boys and girls, more frequently stated they planned

TABLE 2

ITEMS WHICH DIFFERENTIATE SIGNIFICANTLY (5 PER CENT LEVEL)
BETWEEN RESPONSIBLE AND LESS RESPONSIBLE CHILDREN
IN TERMS OF REPORTED PARTICIPATION

Item	Critical Response	Group Showing Greater Percentage	Sex
Sweep floor	Sometimes	Low Responsibility	B
Keep own room neat	Regularly Sometimes	High Responsibility Low Responsibility	B&G
Empty garbage	Regularly	High Responsibility	B
Keep records or accounts for family ..	Never	High Responsibility	B&G
Fill root cellar	Sometimes Never	Low Responsibility High Responsibility	B
Bathe baby	Never	High Responsibility	G
Change diapers	Never	High Responsibility	G
Help select furniture or furnishings ..	Sometimes	High Responsibility	G
Dry dishes	Regularly Sometimes	High Responsibility Low Responsibility	G
Help with preserving food	Sometimes	High Responsibility	G
Prepare food for cooking	Regularly	High Responsibility	G

to get education beyond high school. To each of the questions "Do your parents generally have to remind you to brush your teeth, wash your hands and face, change to clean clothes, or comb your hair," significantly more of the high responsibility children, both boys and girls, responded "no." Among the rural boys more high responsibility boys had driven a tractor in the fields. High responsibility girls responded more frequently with "yes" to the questions "Have you ever held an office in your school class," and "Have you ever worked on a committee?"

While these items could be viewed as expressions of special experience which has served to inculcate a sense of responsibility, they can also be viewed merely as expressions of the validity of the criterion in this instance. Children with a well-defined sense of responsibility probably do require less reminding by their parents, probably *are* more frequently selected for school offices, because of their more dependable behavior! Thus, this analysis affords little help in isolating the kinds of training which can be given to insure or to increase a responsible attitude in children. Certainly, there is little evidence that the routine tasks, such as washing dishes, caring for pets, house cleaning, preparation of food, repairing about the house, are associated with an attitude of responsibility.

TABLE 3

ITEMS WHICH DIFFERENTIATE SIGNIFICANTLY (5 PER CENT LEVEL)
BETWEEN RESPONSIBLE AND LESS RESPONSIBLE CHILDREN IN
TERMS OF REPORTED LIKING OR DISLIKING TO DO THEM

Item	Critical Response	Group Showing Greater Percentage	Sex
Plan games for family	Don't like	Low Responsibility	B
Plan family outings or picnics	Don't like	Low Responsibility	B
Pay bills for family	Don't like	Low Responsibility	B
Keep money records for family	Don't like	Low Responsibility	B
Help select furniture or furnishings ..	Like	High Responsibility	B&G
Build simple furniture or furnishings .	Like	High Responsibility	B
Sweep	Like	High Responsibility	B
Clean own room	Like	High Responsibility	B
Keep room neat	Like	High Responsibility	B&G
Prepare food for cooking	Like	High Responsibility	B
Make outside repairs to roof, siding, doors, etc.	Don't like	Low Responsibility	B
Help paint garage, house, or farm buildings	Don't like	Low Responsibility	B
Repair or paint toys	Like	High Responsibility	B
Plant and care for flowers, shrubs	Don't like	Low Responsibility	B
Dry dishes	Like	High Responsibility	G
Groom work animals	Like	Low Responsibility	G
Shovel snow	Like	High Responsibility	G
Rake yard	Like	High Responsibility	G
Read to younger brother and sister ...	Don't like	Low Responsibility	B

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RESPONSES OF PRESCHOOL CHILDREN TO THE CHILDREN'S APPERCEPTION TEST

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The purpose of this study is to investigate the manner and extent to which certain behavioral dynamics of personality development are revealed in the responses of preschool children to the pictures of the Children's Apperception Test, hereafter referred to as the CAT. The CAT, a picture-story projective technique devised by Bellak and Bellak (2, 3), consists of a series of ten achromatic drawings depicting animals in various situations. The authors of the CAT report the following:

> It is to be used with children of both sexes primarily between the ages of three and ten for maximal usefulness. . . .
>
> The CAT was designed to facilitate understanding of a child's relationship to his most important figures and drives. The pictures were designed with the hope of eliciting responses to: feeding problems specifically, and oral problems generally; to problems of sibling rivalry; to illuminate the attitude toward parental figures and the way in which these figures are apperceived; to learn about the child's relationship to the parents as a couple —technically spoken of as the oedipal complex and, its culmination in the primal scene: namely, the child's fantasies about seeing the parents in bed together. Related to this, we wish to elicit the child's fantasies around aggression: acceptance by the adult world, and its fear of being lonely at night with a possible relation to masturbation, toilet behavior and the parents' response to it. We wish to learn about the child's structure and his dynamic method of reaction to—and handling of—its problems of growth (2, p. 1 ff).

The CAT was released on the basis of 200 records of children between the ages of three and ten. The size and nature of that portion of the sample under six and one-half years was not reported. Unpublished studies and research in progress on the CAT have been reported by Holt (7). No studies of the CAT at the preschool level have been reported. Studies (1, 4) using pictures as a projective technique with preschool children have been more concerned with methodological problems and formal aspects of the responses than with the dynamics of personality development. The CAT has been offered as a means of exploring these dynamics by the picture-story projective method.

On the basis of the statements made by the authors of the CAT and the limited research reported, especially at the preschool age level, the need for further investigation is apparent. This study attempts to fulfill part of this need by determining the face validity of the CAT at lower age levels.

In particular, this study is concerned with (*a*) the extent to which preschool children give apperceptive responses to pictures of the CAT, and (*b*) the extent to which these responses reveal those dynamics of inner life which the pictures were designed to explore. The data of this study should also serve the additional need of normative data necessary for the interpretation of a projective method. As a result of this inquiry, it is hoped that something will be added to the understanding of the picture-story method of studying personality development, particularly its application during the early formative years.

METHOD

Subjects. The subjects for this study included 38 boys and 42 girls ranging in age from two years eight months to six years five months. All were enrolled in the two kindergartens and the nursery school of Florida State University. Intelligence level, socio-economic status, and health of this group are above average when compared to the general population.

Administration of the CAT. The CAT was administered individually by the senior author and/or the child's teacher in quiet, familiar surroundings. No coercion was used to elicit responses and each child was free to terminate the session as he felt a need to do so. The pictures were presented as a game in which the child was to tell a story about each picture. Failing to tell a story the child was asked, "What is happening? What are the animals doing?" When appropriate he was asked, "What happened before?" and, "What will happen next?" Encouragement was given freely but care was taken not to be suggestive. All questions and responses were recorded verbatim by the examiner in an abbreviated longhand. Side remarks and significant activity were noted. Occasionally a child was not understood; on these occasions he was asked to repeat what he had said. Recording of responses was complete for over 95 per cent of the cases.

Analysis of Data. For purposes of analysis, everything a child said in responding to a single picture was considered a response. Every response was analyzed independently of the child's other responses and again in its relation to the total protocol. The first analysis was primarily stimulus oriented and provides a means for tabulating norms. The second analysis in protocol context was subject oriented and provides a measure of the child's needs and dynamisms.

In order to determine the extent to which the CAT elicited apperceptive responses, each response was classified and tabulated as *enumerative, descriptive,* or *apperceptive.* A response was considered enumerative if it did no more than name one or more objects in the picture. It made no difference whether the object was named correctly or not if it was obvious to what was being referred. Examples of enumerative responses were: "Little chicks." (Picture 1); "There's a crib. This house. Look at the bed." (Picture 5).

Responses were classified as descriptive if they did no more than describe the objective features of the picture. Examples of descriptive responses were: "It's a lion. Looks like he was smoking a pipe. There's a mouse. Has a walking cane too. The mouse is looking at him." (Picture 3); "A rabbit in bed. He's awake. The door's open." (Picture 9).

Responses that indicated interpretation beyond the objective features of the picture were classified as apperceptive. These were the responses that revealed the psychological dynamics operating at that particular time enabling the child to meaningfully interpret the stimulus and reveal certain aspects of his private world. Apperceptive responses were further classified and tabulated according to the dynamic forces they revealed. For purposes of this study these dynamics were limited to those suggested by Bellak and Bellak (2) as being typical to the specific pictures. Apperceptive responses that did not fit any of the categories were classified as "other." A response that contained enumeration and/or description but also included apperceptive elements was classified as apperceptive. The introduction of objects or places was also considered as apperceptive material. Examples of apperceptive responses were: "They're going to pull that bear up. She'll slip and he's going to fall down. And all of 'em will fall down." (Picture 2); "A bed and some bears. A little teeny bed. A lamp. They are fightin'. Mama will spank 'em 'cause they've been bad." (Picture 5). In all analyses an effort was made to stay close to actual wording and attitudes expressed rather than use diagnostic or symbolic interpretation.

RESULTS

In general the stories were brief and often lacked plots and formal aspects of causation and outcome that are found in older children's stories. There was a marked lack of spontaneity and much questioning was needed by the examiner to obtain responses. In spite of specific questions such as, "What have the animals been doing?" and, "What is going to happen next?" enumerative and descriptive responses persisted. Table 1 shows the number and distribution of enumerative, descriptive, and apperceptive responses for each picture. One hundred and fifty-nine (20 per cent) of the 800 responses were classified as enumerative and descriptive. The pictures appear to be relatively equivalent in their ability to elicit apperceptive responses with the possible exception of the first picture which is slightly lower than the others.

When the apperceptive responses were examined for the types of dynamics they contained, it was found that they highly agreed with the area or areas each picture was designed to investigate. In addition, certain dynamics continued to appear in responses to pictures not specifically designed to explore these dynamics. Frequencies of the dynamics for each picture and the total frequency of each dynamic are presented in Table 2.

TABLE 1

FREQUENCIES OF ENUMERATIVE, DESCRIPTIVE, AND APPERCEPTIVE
RESPONSES OF 80 PRESCHOOL CHILDREN TO PICTURES OF THE C A T

	PICTURE NUMBER											Per Cent of
Response	1	2	3	4	5	6	7	8	9	10	Total	Total
Enumerative	3	2	3	..	4	1	1	..	3	1	18	2
Descriptive	32	17	15	21	7	21	4	2	15	7	141	18
Apperceptive	45	61	62	59	69	58	75	78	62	72	641	80
Total	80	80	80	80	80	80	80	80	80	80	800	100

TABLE 2

FREQUENCIES OF THE DYNAMICS REVEALED IN THE APPERCEPTIVE
RESPONSES OF 80 PRESCHOOL CHILDREN

	PICTURE NUMBERS											Per Cent of
Dynamic	1	2	3	4	5	6	7	8	9	10	Total	Total
Orality	21	3	11	31	4	21	2	7	14	1	115	10.2
Sibling Rivalry ...	2	..	..	10	2	..	..	..	..	..	14	1.2
Aggression	3	37	17	5	3	8	68	3	3	3	150	13.3
Fear	..	..	1	4	10	6	..	1	9	..	31	2.8
Toileting	..	..	..	..	..	..	..	..	..	14		
(Cleanliness) ..	2	..	..	..	..	..	..	..	..	16	32	2.8
Sexuality	..	..	..	4	5	..	..	..	1	..	10	.9
Identification with Mother ...	17	33	2	65	37	60	5	36	13	56	315	28.0
Identification with Father	2	34	4	9	31	57	4	53	6	14	194	17.3
Acceptance by Adults	1	..	41	..	1	6	1	4	1	42	97	8.6
Oedipal Situation .	..	..	..	..	..	35	5	..	..	..	40	3.6
Other	20	8	14	12	9	15	4	13	23	9	127	11.4
Total	63	115	90	140	137	176	65	87	70	155	1125*	100

* Total exceeds 641 (see Table 1) because a response may contain more than one
dynamic.

A brief summary of findings for each dynamic, with examples, are pre-
sented herewith.

Orality. Themes of orality usually centered around eating, about not
getting enough to eat, hunting food, or getting sick.

Picture 1. "That's the table and they're eating and there's the hen and she says she's going to eat up that (points to bowl) and they all don't have anything to eat and she'll cook some more and she eats it and don't let them have any."

Picture 7. "A tiger's trying to get that monkey. He's going to eat him up. Then he'll go hunt for something else to eat."

According to Bellak and Bellak (2), themes of orality are typical responses to Pictures 1, 4, and 8. In this study, orality occurred in the responses to all the pictures. It is highest in responses to Pictures 1, 4, and 6 and relatively high in 3 and 9. The total frequency for these themes was high.

Sibling rivalry. Sixty-one children having one or more siblings furnished the data for this category. Sibling rivalry was considered more broadly in terms of sibling relationships and included aggression between siblings.

Picture 4. "I think they're going on a picnic. He has to stay in the pocket but he doesn't. . . . (Why?) 'Cause he can't walk."

Picture 10. "And mama dog's spanking the baby dog. (Why?) Maybe another puppy and he hit him. (Who?) His brother."

Pictures 1 and 4 were designed to investigate this area. In Picture 4 the child was asked to identify the roles of the animals if he failed to do so spontaneously. A total of 12 themes of sibling rivalry were obtained to these pictures and two to Picture 5. The total frequency of this dynamic was very low.

Aggression. Classification of aggressiveness was limited to those responses in which aggression was explicitly stated.

Picture 2. "Teddy bears fightin'."

Picture 6. "The dynamite is going to explode and blow the whole rocks up. (Then what?) They're dead and can't get up anymore."

Themes of aggression are reported by the authors to be typical in responses to Pictures 2, 3, and 7. Similarly the highest frequencies for aggression in this study occurred in the responses to these pictures but this dynamic occurred in responses to all other pictures. The total frequency of 150 aggressive responses was high.

Fear. The presence of fear was indicated by the child expressing a general or specific fear for/of one of the animals.

Picture 7. "I'm scared of this one. There's a monkey and there's a tiger. Oooh!! (puts hands and arms around head) He's going to eat up the monkey!"

Picture 9. "Hall's lighted up. The room's dark. He's sitting up in bed because he's scared of the dark. The mother and daddy are doing things out in the hall."

The authors of the CAT suggest that themes of flight can be related to unconscious sexual fears. Two such themes were given in responses to

Picture 4. Fear of the dark and fear of being left alone are reported to be "typical" responses to Picture 9. Nine themes of fear were found in the responses to this picture. Picture 5 elicited as many themes of fear as Picture 9; both are scenes of a darkened room. Fear also occurred, in low frequencies, in responses to Pictures 3, 4, 6, and 8. The total frequency of 31 fear responses was relatively low.

Toileting. Responses classified in this category were concerned with toileting or with cleanliness. The dynamic relationship between these two types of behavior was recognized but because they were obviously separate in the responses they were tabulated separately.

> Picture 10. "I know what he did. He wee weed on the towel. I'd like to be that one best (points to puppy)."
>
> Picture 10. "The baby dog's been playing outside and got dirty and has to come in and get a bath. (Do next?) Going to go outside and not get dirty. Mother said they're going to the store and not get dirty."

Picture 10, designed to explore these dynamics, elicited 14 themes regarding toileting and 16 themes concerned with washing or bathing. The only other picture to elicit one of these themes was Picture 1; two responses were concerned with washing before eating. The total frequencies of toileting and cleanliness themes were relatively low.

Sexuality. There were no responses dealing with manifest sex behavior. Sexuality was interpreted as existing in the types of responses given here as examples. Concern with origin of babies was included in this category.

> Picture 4. "The babies have one of those things on so that when they grow up they can have a baby."
>
> Picture 5. ". . . then one wakes up and jumps on the other one 'cause he thinks he's naughty."

This dynamic appeared less frequently than any of the other dynamics investigated. A total of ten themes of sexuality occurred in responses to Pictures 4, 5, and 9. Themes of sexuality are reported to be "typical" responses to these pictures and to Picture 6. Sexuality was absent in the responses of the preschool children to Picture 6.

Identification with Mother. Any mention of the mother in the child's response was considered significant and classified as an identification with the mother. In Pictures 2, 4, 8, and 10 the child was asked to identify the roles of the animals if he failed to do so spontaneously.

> Picture 5. "Where's the mama and the daddy? (turns card over) Aren't they over on this side?"
>
> Picture 9. "A little mother laying down in bed for the night."

Maternal identification occurred more frequently than any other dynamic. All pictures were capable of eliciting this kind of response. Maternal identification exceeded paternal identification in responses to all pictures except 3 and 8. The highest frequencies occurred in responses to Pictures 4, 6,

and 10. Only in Picture 4 was the animal purposefully drawn to represent the mother. Picture 6 depicts two large bears and in Picture 10 no clue is given to identify the sex of the large dog. Twelve boys and 21 girls identified with the mother on Picture 2.

Identification with Father. Any mention of the father in a child's response was considered significant and classified as an identification with the father.

> Picture 3. ". . . then daddy will call some of his giants."
> Picture 2. "I think daddy bear will get it."

Paternal identification ranked second with a total frequency of 194. All pictures were able to elicit this dynamic. The low frequency for Picture 3, which was specifically designed to test this area, was obtained because the child was not asked to identify the role of the lion. Only four children made this identification spontaneously.

In an attempt to measure the reliability of children's identification with a parent figure, as indicated by their choice of parent with the small bear in Picture 2 (Revised Edition), a retest was made. Picture 2 was presented a second time, after an interval of two to four weeks, to a random sample of 36 of the children. This picture depicts one adult bear pulling on one end of a rope and a similar bear pulling on the other end assisted by a small bear. The child is thus forced to identify with one of the parents if he names them as such. Fifty per cent of the children repeated their initial choices and identified with the same parent while the other 50 per cent changed their identification to the other parent.

Acceptance by Adults. Acceptance by an adult was evidenced in a response by the child's concept of the adult figure as admonishing or inhibiting, whether he saw himself rejected, or felt a need to "run away."

> Picture 6. (What will baby bear do?) "Sneak away. (Why?) 'Cause maybe he doesn't like his mom or pop. I guess he just wants to. . . . If they find him they'll switch him. Just what I feel like doing sometimes. One time mama spanked me and I didn't do anything."
> Picture 10. "The mother's spanking the little puppy. (Do?) Run away again so his mother won't know where he is."

The pictures designed to explore this area are 3, 9, and 10. Frequencies of this dynamic in the responses to these pictures were 41, 1, and 42 respectively. Low frequencies also occurred in responses to Pictures 1, 5, 6, 7, and 8. The total frequency of 97 of this dynamic was average.

Oedipal Situation. Oedipal dynamics were revealed by the child's concern about his parent's as a couple, particularly as they were seen in bed.

> Picture 5. "There are two babies in the crib. The papa and mama are all snug in here."
> Picture 6. "There's the mother bear. . . . Why he didn't get in bed with mother and father? I think it's night."

Pictures 5 and 6 were designed to investigate this relationship. Thirty-five responses to Picture 5 and five responses to Picture 6 were classified in this category. No other pictures elicited responses that indicated the child's concept of the oedipal relationship. The total frequency of 40 for this dynamic was average if one confines the meaning of oedipal relations.

Frequency and Intensity of the Dynamics in the Protocols. When the protocols were examined for the intensities of the dynamics they contained, it was found that parental identification, aggression, and orality occurred in over 75 per cent of the protocols. Sibling rivalry and oedipal dynamics appeared in approximately 50 per cent and themes of fears, toileting, and sexuality occurred in less than 25 per cent of the protocols. In two-thirds of the protocols, the dynamics that appeared were considered to be of mild intensity and less than eight per cent of the protocols contained dynamics of severe intensity. Orality and aggression showed greater tendencies to occur with stronger intensities than the other dynamics.

Discussion

Brevity, enumeration, and simple description in the normal preschool child's responses to the CAT pictures should indicate the limitations of formal and complex methods of picture-story analysis at this age level. Methods for obtaining fuller and richer responses need further investigation.

The frequency of a dynamic will be determined by the strength of the dynamic in each child and the nature of the picture used to elicit the dynamic. In order to obtain an accurate measure of the stimulus value of a picture the strength of the child's need should be known. Conversely, if we have a measure of the need-evoking power of a picture we should be able to obtain a measure of the child's needs.

In the design of the CAT pictures certain dynamics were assumed to be operative in the child's personality, therefore if the frequency of a dynamic was high it would indicate that (*a*) the dynamic is operating and (*b*) the specific picture is a valid means of measuring the dynamic. Dynamics of high frequency would indicate the more significant drives at this age level. Responses that contained a dynamic not objectively related to the picture (i.e., introduced) would indicate additional strength of the dynamic as a behavioral determinent. However, if the frequency of a dynamic was low it would indicate that either the dynamic was not a significant force in the child's personality or that the picture was not a valid means of eliciting this particular dynamic on a manifest level. In this study neither the strength of the dynamic in the child nor the stimulus value of the pictures were known, thus little more can be said than the fact that a frequency was low. Sibling rivalry, fears, and sexuality were in the low frequency category.

Themes of the oedipal situation and of toileting and cleanliness occurred with moderate frequency and intensity in responses to the pictures designed

to explore these areas but seldom occurred elsewhere. This suggests that projective stimuli for investigating these areas be rather specific for this age level. From the psychoanalytical framework these areas are highly important at this age level since nearly all of the children have just passed through the anal stage and are entering the oedipal phase. Some investigators will no doubt expect more apperceptive material in these areas than was given by the children in this study. However, this study deals with the nature of the manifest content, and an analysis on another level (e.g. psychoanalytic symbolism) would present a different picture.

Themes of orality and aggression were found with relative high frequency and intensity in the responses to the pictures designed to measure these dynamics and with equal frequency in pictures not so specifically designed. Oral needs and aggressive feelings thus appear to play an important role in the normal preschool child's personality development. This finding bears consideration when interpreting the significance of similar findings in the projective material of the preschool age child in the clinical situation.

High frequencies of parental identification can partially be attributed to the fact that seven of the pictures depict adult animals and the child was asked to identify the roles of the animals in five of these if he failed to do so spontaneously. However, many of the responses in this area included elaboration on the relationship to, or personality characteristics of, the parent figure indicating that preschool children easily identify with the figures in the CAT pictures. The type of relationship expressed for both parent figures was more often favorable or benign than admonishing or inhibiting.

Low reliability of parental identification as measured by a retest of Picture 2 would indicate caution in placing significance in a child's single response in which he identifies with one of the parent figures. At least the total protocol should be examined for additional evidence before final interpretation is made.

Pictures 3 and 10 were found to be valid means of obtaining the child's concept of how he is accepted by adults. Since Picture 3 depicts an obvious male figure and the adult dog in Picture 10 was predominantly identified as a mother figure the child's concept of acceptance by both sexes may be explored by the CAT.

The data of this study are offered as a beginning attempt to establish norms for the CAT at the preschool age levels. The importance of normative data for projective methods, early recognized by the Rorschach investigators, has recently begun to receive attention in the picture-story method (5, 6). Before a response can be classified as unique we must first determine what is common. Apperceptive norms help define the degree of a subject's participation in group modes of behavior. Deviations from norms are a measure of individuality.

The collection of normative data is only one of the first steps toward validation of the CAT or of any projective method. There is also a need for further breakdown at the various age levels. The normative approach must be supplemented by deeper analysis of individual protocols along with case history material. Longitudinal studies are needed to explore the developmental characteristics of CAT responses and the dynamics revealed by them. The writers are presently engaged in annual administration of the CAT to as many of the 80 children used in this study as are available in an attempt to study personality development as it is revealed in these early formative years.

SUMMARY

The Children's Apperception Test (CAT) was given to 80 preschool children to determine the extent to which this test elicits responses that reveal certain behavioral dynamics of personality development. Eighty per cent of the children's responses were classified as apperceptive. When judged by frequency and intensity, the dynamics of parental relationship, aggression and orality appear to be more important and more adequately explored by the CAT at this age level than sibling rivalry, fears, and sexuality. Toileting cleanliness, and oedipal dynamics were found to occur only when the stimulus picture was specifically designed to explore these areas. This study presents normative data which should prove helpful in future application and research with the CAT. Areas for additional research are suggested.

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COMPANION CHOICE BEHAVIOR IN
THE KINDERGARTEN

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THE PROBLEM

The purpose of this study was to determine whether or not the sociometric choices of kindergarten children correspond with preferences manifested in actual play associations; and to study the stability of these two types of choice over a period of time.

Experimental evidence relating to the sociometric choices of preschool children is incomplete. Budden (3) analyzed verbal choices by preschool children solely in terms of choice consistency, and made no attempt to compare sociometric responses with actual behavior preferences. F. Moreno (13) used an exclusion technique, in which the favorite companion of a particular child (as determined by observation) was removed from the playground. The behavior of the remaining member of the pair was then observed to determine his secondary preferences. No attempt was made to elicit verbally expressed preferences in this study. Hagman (8) featured a modified verbal choice technique in which the child was encouraged to pick celluloid fish out of a bowl to be given to his friends. These choice data were then compared with time sampling data of actual behavior preferences. No clear-cut relationships appeared between the two types of data. However, Hagman took time samples over a period of several months, and there is the possibility that the playmate preferences of the children in her study might have changed several times during that period. Thus, the time sampling data yielded information as to long-time trends, while the sociometric choices might have reflected at-the-moment preferences. Koch (10) and Lippitt (11) obtained sociometric choices by using the paired comparisons technique, and they compared these choices with observational data as to actual preferences. However, the tendency of the children in these studies to choose the last name in each pair reduced the consistency between reversed similar pairs to as low as 50 per cent, which suggests that the authenticity of the paired comparison choices may be questioned.

Thus, it can be seen that at present, information as to the nature of the sociometric choices of preschool children is lacking. The present investigation was conducted in an attempt to correct the deficiencies of previous studies in this area of social behavior.

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[1] This article is based on a thesis written while the author was at the Institute of Child Welfare, University of Minnesota.

SUBJECTS

The subjects of this study were the 25 members of the kindergarten of the University of Minnesota, Institute of Child Welfare. The average IQ for the group was 125.6 [Stanford-Binet (1937 Form L), or WISC], with a range of 85 to 151. The socio-economic background of the children, as indicated by the number of fathers at the various levels of the Minnesota Occupational Scale, was as follows: Level I, 19; Level II, 1; Level III, 2; and three University students. All of the children were five years of age during the period covered by the study. There were 14 boys and 11 girls in the group.

PROCEDURE

As a basic step toward determining the nature of sociometric choices it seemed desirable to compare these choices with actual behavior preferences. In order to do this, a simple behavior sampling system and a sociometric picture completion technique were developed.

Behavior Sampling Technique

Most studies of preschool social behavior have used methods of observation in which the behavior of a single individual child during a certain time interval is observed and recorded. The majority of these devices have been variations of the time sampling system developed by Goodenough (5, 6) in which the occurrence of a specific type of behavior within a short interval of time is recorded (7, 9, 10, 14, 15); or the situational analysis technique developed by Thomas (16), in which a complete record of focal behavior in chronological sequence is made during a more extended interval of time (1, 2, 11, 12). However, these techniques have been used, for the most part, in making detailed analyses of relatively complex forms of behavior, e.g., friendships (7), popularity (10, 11), social participation and play (14, 15), social behavior in general (1, 12, 16). By comparison, the behavior which was studied in the present investigation (companionship) is quite simple and clear-cut. As a result, it did not seem practical or necessary to require an observer to make a detailed record for each individual child. In addition, the fact that information as to the companionship behavior of all the children over the same short period of time was desired, would have made it necessary to use several observers if the individual child orientation had been used. For the purposes of the present investigation, the approach used by Chalman (4), in which he simply noted the membership of groups seemed more appropriate and convenient. However, Challman employed a 15 second period of observation and defined a group as "two or more children in close spatial proximity or engaged in the same or parallel activity with each other." The disadvantages of this technique (as noted by Challman) were that children were considered in the same group

if they were merely close together, even though they were paying no attention to each other; and that no distinction was made between groups that were engaging in an activity because of a mutual interest in that activity, and those that were composed of children playing together because of more personal interest. In addition, the 15 second observation period complicated the procedure by virtue of the fact that play groups were so ephemeral that they frequently changed in composition during that time. Hagman (8) attempted to improve upon these procedures, using the individual child orientation, by taking the action of the child at the moment first observed as the point of reference, and by determining companionship in relation to an elaborate and carefully defined set of behavior criteria.

In the process of attempting to apply Hagman's system, the writer became convinced that her technique was perhaps too refined for the purposes of the present study. He discovered that by observing the children in the kindergarten he could come to a quick decision (with a definite feeling of confidence) as to which children were playing together at a specific point of time. However, he did not find it possible to relate many of these impressions to any of the formal definitions of companionship developed by Hagman. While the dynamics behind companionship behavior are easily understandable, they are not easily classifiable. It is virtually impossible to evaluate the limitless variations of such behavior in terms of any set of criteria, no matter how complete. Therefore, it seemed desirable to attempt to determine if a more flexible behavior sampling system could be devised. The technique which was developed consisted of recording companion preferences for all of the children in the kindergarten at particular moments during free play periods. In taking the behavior samples, the writer simply observed the group for a few minutes, and then recorded the names of the children he considered to be playing together. At the end of ten minutes he took another such sample. The actual recording process, which consisted of drawing lines from names arranged along either edge of the record blank to descriptions of activities in the center of the page, required only a few seconds. This procedure was felt to combine the advantages of the group approach used by Challman and the behavior-at-the-moment orientation of Hagman, in a simple yet comprehensive technique which seemed especially appropriate to revealing companion preference over a short period of time. Two separate sets of 25 observations made over a period of two weeks were obtained approximately one month apart.

A simple reliability check was made by having the assistant teacher take independent, concurrent samples. Of 171 classifications made, only 21 were disagreements, yielding a percentage of agreement of 87.7. (A disagreement was considered to have occurred if the teacher classified a child as in a different group from that designated by the writer, or if one observer marked a child as playing alone and the other marked him as a member of a group.) Most of the disagreements were due to the tendency of the teacher to classify

a child as playing alone unless she was sure that a definite desire for companionship existed. In no case did any of the disagreements change the standing of the two most frequently played with companions for the period of observation (one week).

Picture Completion Technique

The picture completion technique was used in an attempt to elicit sociometric responses of maximum authenticity. The materials used were two series of line drawings of groups of children depicted in various play situations, and photographs of the faces of all the children in the kindergarten presented to the child as "cut-outs." The line figures were drawn without heads, and were to be completed by selected cut-out faces. In an individual interview situation, the photographed faces were spread out on a table and the child was asked to name each one (to make him aware of all his classmates). Then, a series of three drawings was presented. The first had five figures, the second three, and the final picture had only two. The child was asked to place his own face on one of the figures in the first picture, and then to complete it by choosing the faces of his four favorite playmates. This same procedure was followed for the three-figure picture, with the provision that the two companions be picked from those chosen for the first picture. For the final drawing, the child was required to choose between these two. The companion selected for the final picture was considered to be the first sociometric choice. Two different sets of pictures were presented in this way immediately after the completion of each of the time sampling sessions.

RESULTS

First Session

On the first presentation of pictures, 18 (72 per cent) of the sociometric and behavioral first choices were the same. In two cases, the first behavior choice appeared as the second on the sociometric test. The choice discrepancies of two of the remaining five cases were explainable by simple circumstances, e.g., a sudden quarrel just before the picture session, the absence due to sickness of a favorite companion during most of the behavior sampling period. The other three children played alone most of the time, which prevented any behavior choice differentiation, since they were observed in the company of their favorite companions only four or five times.

Second Session

On the second presentation, (approximately one month after the first) 19 (76 per cent) of the children showed perfect agreement of first choices, and in three cases the first behavior choice appeared as the second sociometric choice. Again, the three discrepant cases were explainable by special circumstances.

Relationships Between the Two Sessions

Nine children maintained complete loyalty to one special companion on all four choice situations. Six of these children were members of reciprocal pairs, and the three remaining children were prevented from coming under the reciprocal category because they were one-choice deviates on one of the sociometric situations. Five additional pairs of children completely changed their allegiance from one child to another. That is, their behavior and picture choices were identical for each of the two separate sessions, but not between the two. For the group as a whole the picture choices were somewhat more stable than the behavior choices from session to session. Fourteen first picture choices were the same on both occasions, while eleven of the behavior choices remained constant.

DISCUSSION

An analysis of the finer preference levels (second, third, and fourth choices) revealed no clear-cut trends. There was some agreement between choices, but not to the extent of first choice agreement. The outstanding characteristic was the degree of individual variation in choice behavior. These data seemed to indicate that there was a highly variable social atmosphere in the group studied, in which playmate preferences changed rapidly. Each child seemed to have a fairly definite desire to play with a single favorite companion. There was also some tendency for cliques to form from which secondary choices were made. However, there did not appear to be any clear-cut and consistent hierarchy of choice within these cliques beyond the first, and occasionally the second, choice levels. Thus, for the kindergarten studied, it could be said that each child maintained a fairly consistent and permanent desire to play with a certain specific companion and was successful in satisfying this desire quite frequently in play situations, but that secondary playmate preferences depended for the most part on the situation at the moment. The child adjusted to each specific situation by selecting the most readily available and acceptable playmate from a rather extensive pool consisting of the majority of the members of the kindergarten.

SUMMARY

An attempt was made to determine if "sociometric" responses of preschool children correspond with actual behavior choices, and to discover the relative stability of the two types of choice. Behavior preferences were obtained by using a behavior sampling technique. These data were then compared with sociometric responses elicited by having the child place photographs of the faces of his classmates on headless figures depicted in line drawings. Two sets of data were obtained one month apart. The results indicated high agreement between behavioral and sociometric first choices for each of the two separate sessions. This agreement was high

enough to permit one type of choice to be used as an index of the other. There was some change of allegiance in choice between sessions, however. Lack of agreement between finer choice levels suggests that a child may have one or two very good friends, but that he will choose any of several less liked companions when his favorite playmate is not available.

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CONTRASTS IN BOYS' AND GIRLS' JUDGMENTS IN PERSONALITY

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As a dynamic entity, the personality of the child is in a constant process of development. Realizing this, psychologists and research workers are continuously studying methods best calculated to measure the child's personality and the procedures for a wholesome development thereof, particularly during the early, more formative years of the child's growth (1, 3, 5, 11, 14).

Though some maintain the framework of the young child's personality to be fairly well structured by the time he enters school, others argue for its pliancy during the years of his elementary and junior high school life (6, 7, 16, 17, 21). The social environment of the school is an influence not to be ignored in the study of the child personality.

Graves (15) stresses the inter-relation of the child's environment and nature in the development of his personality. In her experiment, Stiles (20) found that changes in the child's approach to behavior and in his understanding of that behavior can be made on the elementary school level. Ausubel, et al., (9), deplores the large gaps that remain in our knowledge of the developing social perceptions of children. McGuire and Clark (18) consider the concomitants of peer acceptance to be significant in various aspects of personality formation.

PROCEDURE

The present experiment seeks to secure a picture of the child personality as viewed through the eyes of children. Boys and girls do have ideas and do make judgments, but from a child's frame of reference, which is not always identical with the adult frame of reference. This is a point frequently overlooked by educators.

For this investigation of sex and grade-level differences, boys and girls of grades four through eight were asked to rate their classmates on twenty-two personality traits (2, 4, 12). This resulted in some 500 ratings for each of grades four, five, and six; 300 for grade seven; and, 200 for grade eight.
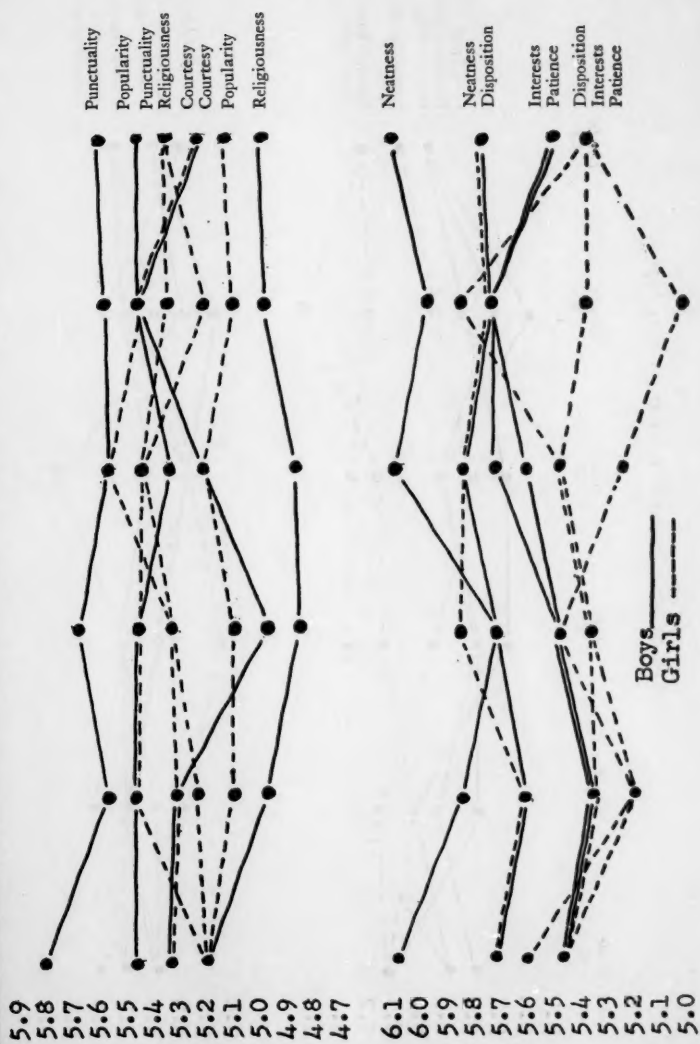
Each child's ratings were averaged separately by sex. From these averages, means were computed separately by grade level and by sex. The results are obvious in the graphs portrayed in Figures 1 to 4 inclusive.
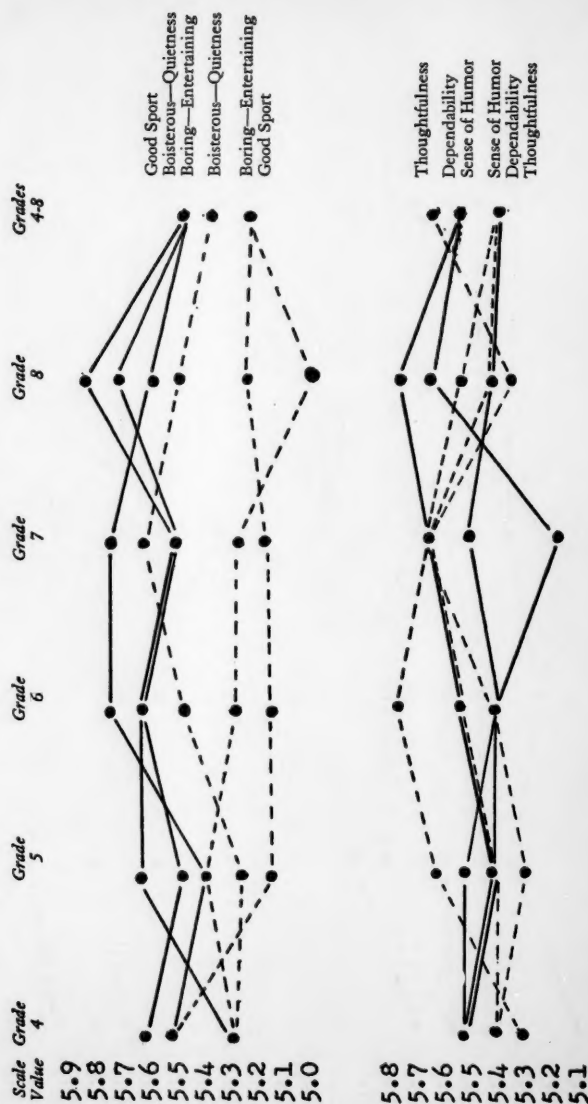
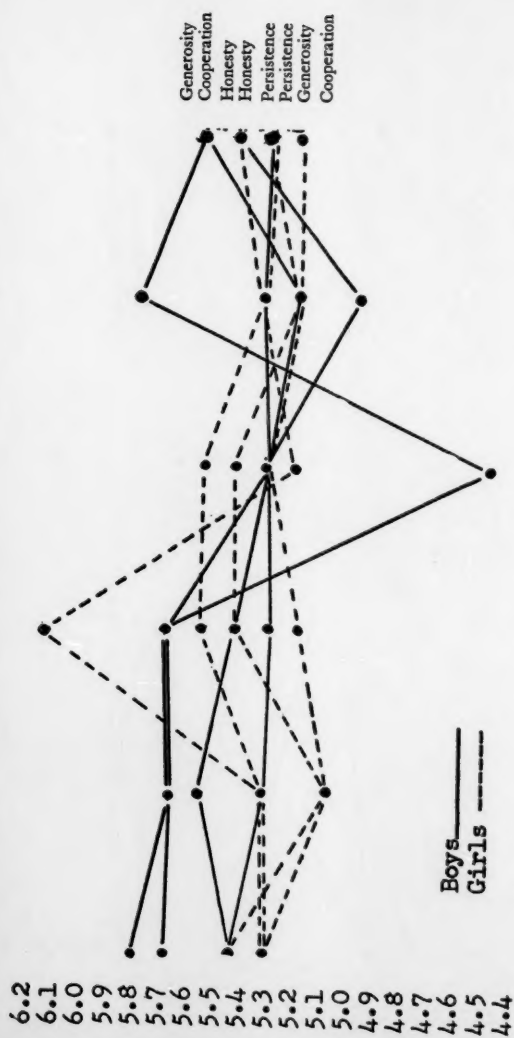FIGURE 1—Mean ratings of peers as given by boys
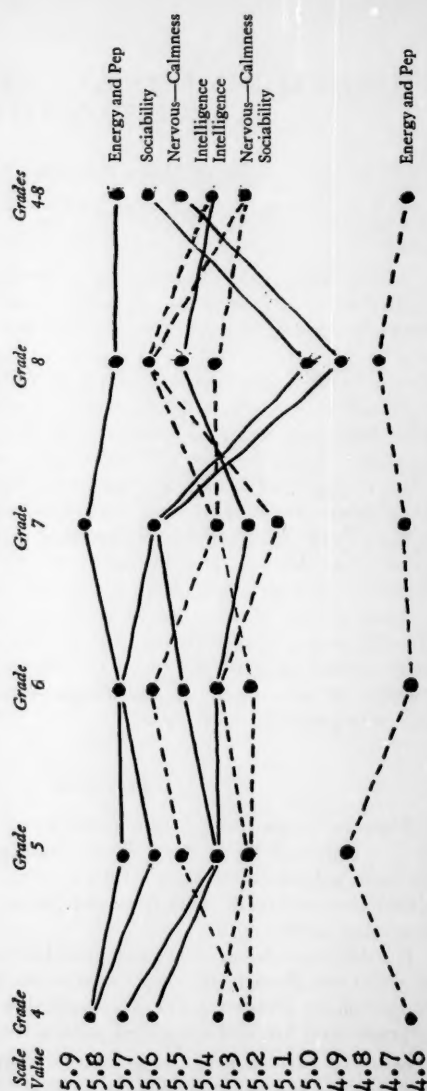
FIGURE 2—Mean rating of peers as given by boys

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FIGURE 3—Mean ratings of peers as given by girls
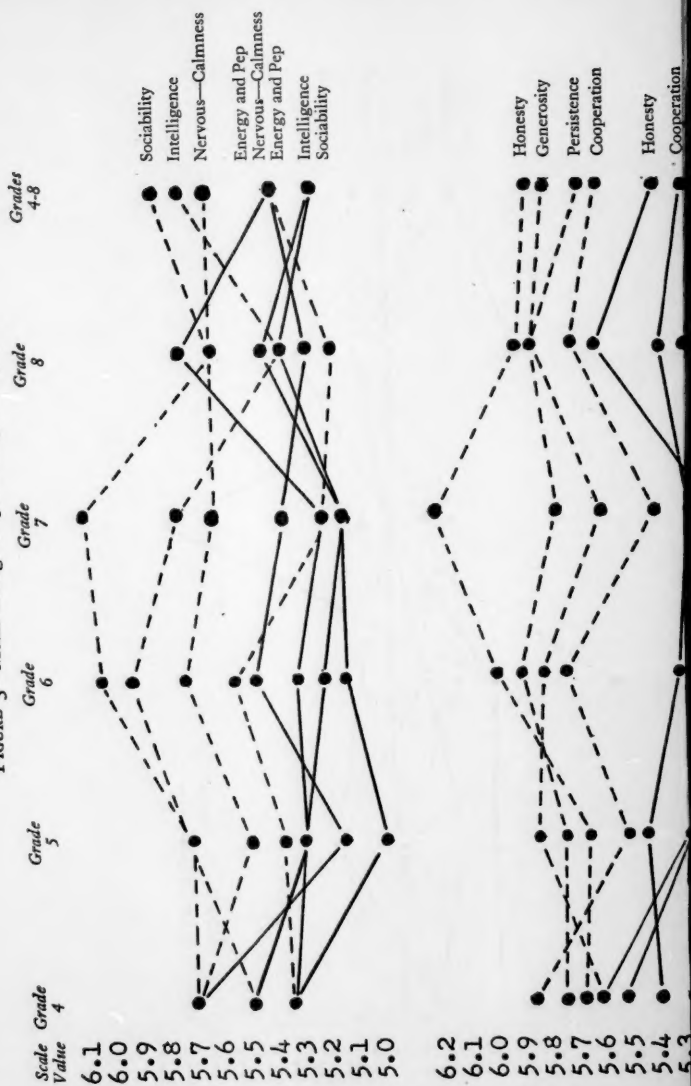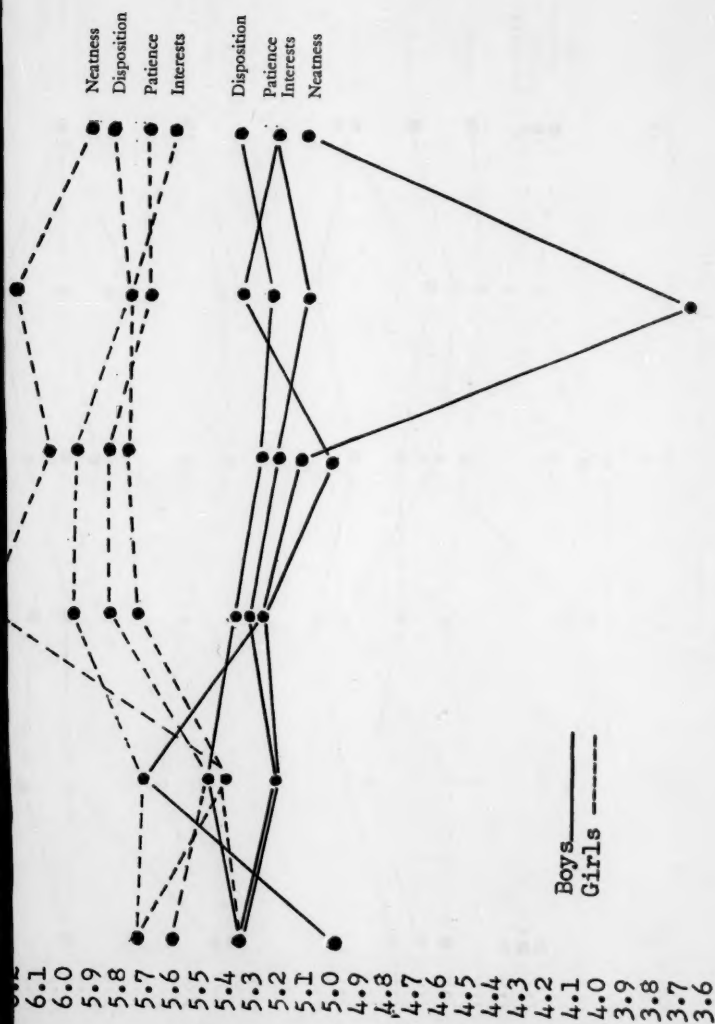
FIGURE 4—Mean ratings of peers as given by girls
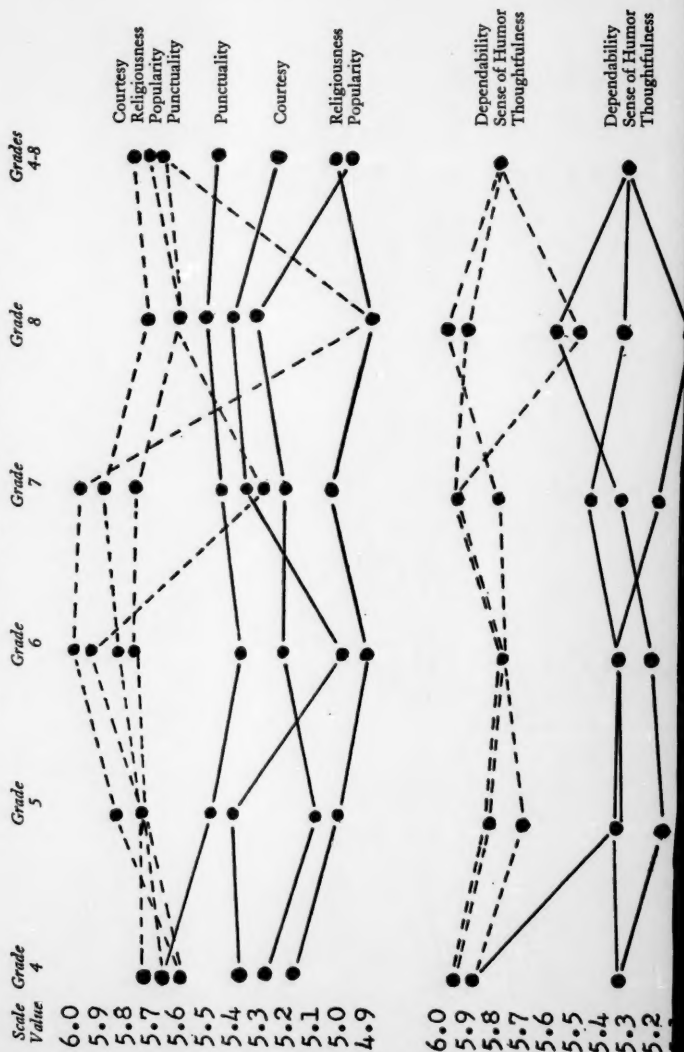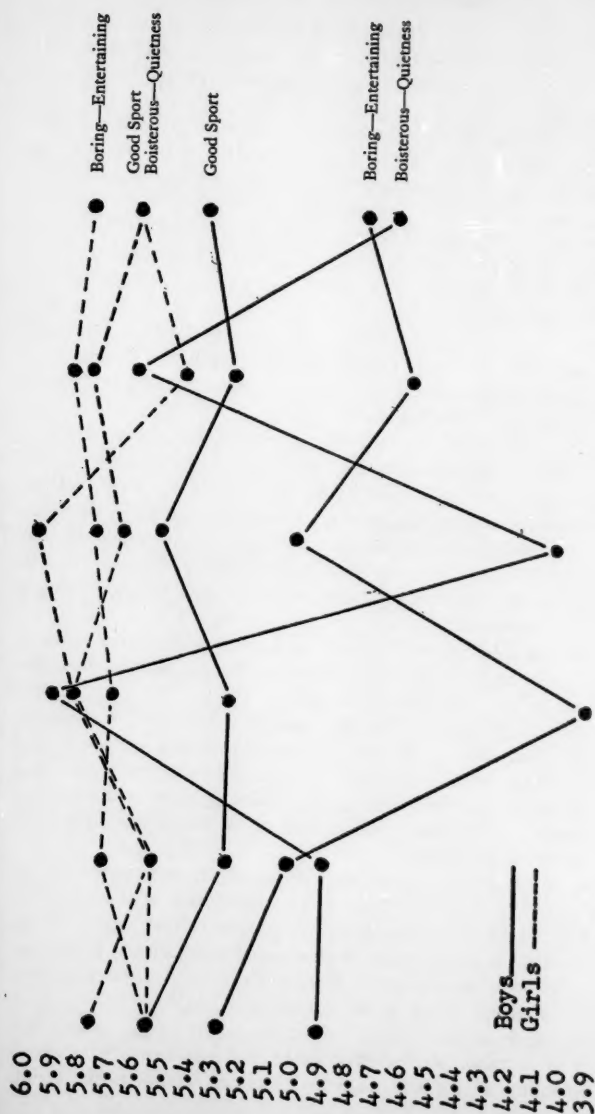
Interpretation of Results

An over-all preview of the graphs shows, with few exceptions, that there is very little grade to grade differences in the peer estimates of personality. But when each group of traits is analyzed separately, sex differences are readily discernible.

1. *As Boys See Their Peers.* On Figures 1 and 2 are graphed the mean ratings given by boys to the boys and girls of their class on each element of personality measured. A brief inspection of these two figures reveals that the boys are quite conservative in their ratings both of boys and of girls.

The most outstanding trait difference is for "energy and pep" (Fig. 1) which rates practically the same for all grade levels, but in which the boys are rated consistently above all other traits, and the girls are rated consistently lower than all other traits. Boys (Figs. 1 and 2) also rate girls slightly lower on good-sportsmanship, interests, entertaining, boisterous-quietness, popularity, patience, punctuality, and dependability. However, the boys also consistently rate the girls slightly higher than boys at all grade levels on courtesy and religiousness.

On the other traits there is an overlapping from grade to grade that does seem to indicate developmental trends. Particularly is the crossing of lines from seventh to eighth grade conspicuous in a number of traits, such as nervous-calmness, sociability, disposition, and sense of humor. In the lower grades the boys rate boys higher on these, but by the eighth grade the boys rate the girls higher on these elements of personality. Whether the real change is in the boys who did the rating, or in the girls who are rated, is a question not answered!

2. *As Girls See Their Peers.* Turning to Figures 3 and 4, one observes a marked change in the general appearance of the graphs. On these, the rating is done by the girls. Most outstanding is the fact that in practically all cases girls rate girls higher than they rate boys. The only exceptions to this occur on three scales: Girls give boys a small margin on energy and pep in grades four, seven and eight; on punctuality in grades four and eight; and on boisterous-quietness in grades six and eight. In the total of 220 means represented in Figures 3 and 4, only seven means favor the boys, while 213 place the girls higher.

However, three definite developmental trends are perceptible in the graphs of these two figures : 1. In a few scales, such as dependability, interests, sense of humor, and disposition, the grade level ascents or descents are parallel. 2. In the others, such as sociability, patience, generosity, honesty, and estimate of intelligence, there is a widening of the differences between sexes from the fourth to the seventh grade, followed by a narrowing of these differences from the seventh to the eighth grade. 3. In a few scales, such as neatness, good sportsmanship, and punctuality, the spread between the ratings of the sexes increases from the seventh to the eighth grade.

Implications and Conclusions

The present investigation reveals pertinent contrasts between boys' judgments of the personality of their peers and girls' evaluation of peer personality.

Boys judge boys slightly higher on some elements of personality, but are far more conservative, exhibiting only small differences in their judgments of boys and of girls.

Girls, on the other hand, show extremely decided preferences for girls in their evaluations of the elements of personality herein measured.

The study reveals clearly that boys and girls of the elementary school are capable of having and of expressing judgments of peer personality.

Further and deeper analyses of similar data might reveal additional pertinent facts relative to the sex doing the rating. What is there in the boy's personality that makes him more conservative than the girl? Do the girls think themselves superior to boys on these twenty-two components of personality? What significance is there in the obvious shifts in judgments of peer personality from seventh to eighth grade?

Additional study of the contrasts brought into focus on specific components of personality investigated in this experiment could be both enlightening to those studying child development and profitable to the children whose personalities are in process of development.

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FAMILY BACKGROUNDS OF ASSERTIVE AND NON-ASSERTIVE CHILDREN [1]

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This paper is a review of the literature to obtain leads as to the family backgrounds of ascendant and non-ascendant children which in turn could constitute the hypotheses of future investigations. The ascendance studies, especially the last four by the writer, indicate wide individual differences both in the quantity and quality of ascendant behavior between preschool children from the upper socio-economic and educational levels. But they give little information about the environmental factors which differentiate one type of ascendance from the other. No study has been made of the significant question of what kind of homes produce individuals ascendant enough to go after what they want but at the same time accomplish their purposes in socially positive ways; individuals not only trained in democratic methods such as discussion and compromise, but motivated by values which respect personality. For leads as to possible relationships it has been necessary to go to studies which investigate several personality traits similar to ascendance. The term *assertive behavior* is being used in title and context to cover these several traits. The limitations of bringing together in this piece-meal fashion the findings of many studies must be recognized at the outset.

DEFINITION OF ASCENDANCE

Ascendant behavior is defined in the later studies as follows: (32, p. 42)

> Ascendant behavior is any kind of behavior by which an individual attains or maintains mastery of a social situation or attempts to attain or maintain mastery so that he is in control of his own activities and can carry out his purposes. In terms of overt behavior at the preschool age, attempts at mastery of a situation include:
>
> 1. Attempts to secure materials he wants from his companions.
> 2. Attempts to direct or influence the behavior of companions.
> 3. Attempts to defend himself, his possessions and activities, and to resist the direction of others.
>
> Mastery includes:
> 4. Success in the above three types of attempts.

Ascendant behavior varies among individuals not only quantitatively, in terms of how frequently one is assertive; but qualitatively, in terms of

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the social acceptability of the methods used. From the standpoint of regard for personality and the effect on social relationships, there is a vast difference between a child saying to his companion: "If you don't do what I tell you to I'll smash your truck," and "I know. Let's play we're making a road. I'll bring the sand to you in the truck and you sift it."[2] Any investigation of family backgrounds should include in its purposes, therefore, an attempt to distinguish between the homes of assertive children who use socially acceptable methods and the homes of those who use socially unacceptable methods.

In the ascendance studies, *acceptability* was defined as follows:

> Any method is held to be socially acceptable which shows regard and appreciation for human personality and welfare: i.e.,
>
> 1. Does no bodily harm and inflicts no physical pain on another person.
> 2. Does no injury to his personality or ego.
>   a. Recognizes the right of a human being to some share in decisions concerning himself and permits the freedom necessary for voluntary action.
>   b. Requires of another no loss of status, no sense of defeat or thwarted purposes.
>   c. Accepts another as a human being with powers of reason, desires, and purposes which are to be considered. (32, p. 46)

It should be noted that this definition would hold only in a democratic society whose philosophy rests upon respect for personality.

What tentative answers can be found in the literature, then, to these four questions:

1. What types of homes make for assertive children?
2. What types of homes make for unassertive children?
3. What types of homes make for socially acceptable assertiveness?
4. What types of homes make for socially unacceptable assertiveness?

Pertinent Findings of the Ascendance Studies

Contributions of the ascendance and closely related studies to significant home factors are as follows:

1. Three-, four-, and five-year-old nursery school children, all from homes in the upper socio-economic and educational levels show wide individual differences both in amount of ascendance and in acceptability of method. The related studies of Anderson and Chittenden have similar results. (1, 10, 21, 32, 33, 34)

2. The only children of lower socio-economic backgrounds that have been measured were residents of an orphanage and thus their scores cannot be

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[2] In Anderson's terminology (1), the first would be dominative and the second integrative.

interpreted in terms of family background (15). Studies of Davis on social class differences have found that lower class parents not only tolerate but encourage forceful methods of assertiveness frowned upon in middle class culture (12).

3. A comparison of northern and southern three- and four-year-old nursery school children from the upper socio-economic and educational brackets indicates no measurable differences in frequency of ascendant behavior or in acceptability of method between these two sub-cultures (34).

4. In a study by Stott and Mummery (35), young parents of high educational and socio-economic status appeared to rate children's ascendant behavior in a manner consistent with a democratic philosophy. The fact that the scores of children from similar homes are less than half-way up the scale of positive social acceptability (34, p. 190) suggests that a study of relationships investigate not only parents' feelings and attitudes but actual guidance practices and parents' own behavior in both parental and peer relationships.

5. A comparison by Thompson (43) of two educational programs indicates that a warm, friendly, helpful, responsive teacher-child relationship which satisfies a child's need for information is favorable to emotional security as indicated in part by higher ascendance scores and more constructive behavior when faced with failure. A positive approach to difficulty, as Murphy (26) has suggested, is undoubtedly a manifestation of a child's attitude toward himself which underlies social behavior and thus probably affects his assertiveness. Inasmuch as Thompson used the *Jack* measure of ascendance, his results do not discriminate between socially acceptable and unacceptable behavior.

WHAT HOME CONDITIONS ARE RELATED TO AMOUNT OF ASSERTIVENESS?

Studies of Parent-Child Relationships

Early studies of parent-child relationships suggest trends some of which have been corroborated by later investigations. Their results are summarized by Radke (38). In a more recent study Miles (30) found significant relationships between adolescent social behavior and status among peers and (*a*) socio-economic status and education of parents, and (*b*) the attitudes and opinions of parents regarding child training and their goals for their children. Parents of successful leaders differed greatly from parents of asocial, outcast, and overlooked children. They were less inclined to protect children from normal risks and responsibilities, or to prevent a normal degree of independence. They tended to be less restrictive in degree of control; to allow more leeway in decision making, using own judgment, and experimenting; and to give more respect to child personality in such ways as consideration for his rights and opinions. They appeared to possess superior

ability in evaluating child behavior and personality traits desirable for optimum development.

Some of the best controlled studies in this area are a series from the Fels Institute. Over a period of years Champney, Baldwin and others have contributed a good deal by the development and refinement of a battery of graphic rating scales of home environment and by exhaustive studies of relationships to child behavior. In one paper by Baldwin (7) the consequences of Democracy and Control in the home are investigated. When the Parent Behavior Rating Scales were factor analyzed, two positively related factors of home environment emerged. The first, Democracy, is characterized by: (7, p. 129)

1. A higher level of verbal contact between parent and child; i.e.,
   a. Consultation about policy decisions.
   b. Explanation of the reasons for rules.
   c. Explanation in response to the child's curiosity (answering why and how questions).
2. Lack of arbitrariness about decisions.
3. General permissiveness.
4. Restraint on emotionality.

The second, Control, is characterized by:

1. Restrictions on behavior which are clearly conveyed to the child but not necessarily arrived at democratically.
2. Lack of friction over decisions of discipline, which may be due to:
   a. Talking back being prohibited.
   b. Easy conformity of the child.
   c. Policy being the result of mutual agreement.

Baldwin's results indicated that Democracy, when Control was held constant, generally raised the activity level and produced a significantly more aggressive, fearless, planful child likely to be a leader but also more cruel than the average child and tending to be disobedient, a non-conformist, and more curious than the average. The effects of Control when Democracy was held constant were more significant and in the opposite direction. When the two occurred together, high Control and a lack of Democracy had marked consequences, significantly lowering aggressiveness, cruelty, quarrelsomeness, resistance, disobedience, negativism, excitability, affectionateness, curiosity, originality, and fancifulness. It would seem to the writer that high Control and low Democracy rules out the possibility that any of the control comes from democratic sources, and therefore that such homes could be called authoritarian. A home in which there was this authoritarian type of control would be likely to produce a child who was quiet, well-behaved, non-resistant, unaffectionate, and at the same time socially unaggressive, and restricted in curiosity, originality, and fancifulness. The effects of high Democracy and a lack of Control were, in general, opposite in direction but few of the variables were statistically significant.

Are these the types of personality traits expected from democratic and authoritarian homes? Baldwin states that the results generally confirm our impressions of the effects of freedom and restrictiveness. He says that authoritarian control, in getting conformity to cultural demands, seems to rob the child of the personal integrity which gives him a mind of his own and supports him in finding out about things and carrying out his ideas. It obtains conformity at the expense of personal freedom in areas not intended to be restricted; for example, in freedom to grow in ideas and in affectionateness. Democracy, on the other hand, runs the risk of producing too little conformity to cultural demands (7). But would we logically expect a home in which democracy was a part of everyday living to produce a child who showed so little consideration for others that he was actually more cruel than other children? Democracy as defined in the Fels' studies might be expected to produce the results obtained; but democracy which is not extreme permissiveness but instead sets limits to freedom, in the writer's opinion, would not have those results. Similarly, the behavior related to Baldwin's factor Control would seem to result from a certain kind of control, namely, strictly authoritarian. These studies deal with control almost entirely in terms of *more* or *less* restriction, *more* or *less* clarity, *more* or *less* success (lack of friction). In fact, they lump together a lack of friction due to (*a*) talking back being prohibited, (*b*) easy conformity on the part of the child, and (*c*) the fact that the policy is the result of a mutual agreement between parent and child. The effects of control as they impinge on the child are quite different if he has had some part in making disciplinary decisions than if he has not; if restrictions are based solely on the convenience of the adult or his need to express resentment, or on a real consideration for the child's welfare. To make differentiations between homes that are meaningful in terms of ascendant, non-ascendant, socially acceptable and socially unacceptable ascendance, the concept of control must take into account not only the degree of control, but its pervasiveness, its sources (whether from adult, child, or by mutual agreement), and the motives or goals which prompt it. The key to the situation is not so much whether there is or is not control in the home, but when, why, and by whom it is exercised.[3]

Similarly the factor Democracy, in the writer's opinion, is a one-sided concept. The Fels' definition indicates that the parents show respect for the child's personality, but it has nothing to say about the fact that the democratic home teaches the child consideration and respect for others; that it gives the child experience and guidance in seeing the other person's point of view, and in using socially considerate methods of carrying out one's purposes. Democracy concerns itself with social responsibility as well as privilege. It is permissive only under circumstances that do not interfere with the rights of others. The social values of democracy have been left

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[3] In this point of view, the writer has been influenced by Anderson (5).

out of the definition, as if the child develops his personality in a vacuum instead of in a group of others who also have needs and rights. For this reason, the findings include the socially negative as well as the socially positive traits undifferentiated from each other. The Fels' concept seems better to describe a child-centered than a democratic home.[4] Just as in the analysis of control, democracy has other dimensions than *more* or *less* reasoning and permissiveness. Baldwin states that, as practiced in the Fels' families, Democracy seems to be accompanied by sufficient Control to avoid too little conformity. I would like to suggest that the Fels' democratic families differed from other families, although the measure failed to catch it, not so much in the amount of control as in the kind: a kind of control that does not block and hem in assertiveness; but, respecting personality, channels it in ways to make it socially acceptable and creative, thereby actually freeing it, for control and freedom are not diametrically opposed.[5] In effect, knowing that without control there can be no democracy, these families apparently possessed a sense of values which set limits to permissiveness. In our research investigations we need to capture just what these families did. Can we describe it in terms of the *areas* of control, the *limits* of freedom, etc.?

Likewise, the Fels' concepts seem to give no social evaluation to their child behavior variables of aggressiveness and competitiveness, although Baldwin does state that these two variables take on a different flavor in each of the two overlapping syndromes of Aggressiveness-Competitiveness-Leadership-Curiosity and Aggressiveness-Competitiveness-Cruelty-Quarrelsomeness-Resistance.[6] The relationship of democracy and control to what we are broadly calling assertiveness can be sharpened and modified by a refinement of concepts in terms of goals, values, social acceptability in a democracy, etc. A failure to evaluate in terms of developmental goals and to separate out the desirable from the undesirable, the democratic from the undemocratic aspects is seen in the Fels' definitions of Control, Democracy, Permissiveness, General Activity Level of the home, causes for Lack of Friction, Aggressiveness and Competitiveness. Each of these variables of child and of parent behavior is treated as two-dimensional only, whereas each is multi-dimensional. To be of practical use in the guidance of children, research findings must discriminate not only between home environments which allow free expression of the drive to assertiveness and those which block it, but between factors which allow undesirable expression and those which channel self-assertion in ways to make it socially positive and inte-

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[4] In one statement Baldwin indicates that the factor Democracy describes the philosophy of the early 1930's when there was much emphasis on giving a child "freedom to express his personality."

[5] In fact, the general factor accounting for the overlapping of Democracy and Control may well be considerateness and respect for personality.

[6] The "general factor of activeness" which Baldwin says accounts for this overlapping may be very similar to assertiveness without any social evaluation.

grative. Assuming adequate research tools, future studies that make qualitative as well as quantitative distinctions in definitions should more effectively differentiate just what it is in the home that produces non-assertiveness, and what it is that favors socially acceptable as opposed to unacceptable assertiveness.

Baldwin discusses the relationship to socialization of a third aspect of home environment, its General Activity Level as shown variously by (a) a well-ordered schedule, (b) a continuous flow of criticism and suggestion, (c) child-centeredness, and (d) special training and acceleration. The findings indicate that Democratic Active homes result in more aggressiveness, quarrelsomeness, competitiveness, resistance, curiosity, emotional excitability, impatience and cruelty than do Democratic Inactive homes. This factor appears to the writer to be *inter*-activity. Here, again, it would seem that a definition is called for in terms of the quality of the interaction, the feeling tone and motivation behind the above manifestations. Some of the findings would seem to be related to such motivation of the home as neurotic drives. In such cases, the child, feeling resentment, may rebel against the constant pushing and the lack of opportunity to be himself. This rebellion may influence the quality of his assertiveness.

Baldwin concludes that at the preschool years high (inter-) activity is accompanied by non-conformity and rebelliousness, and that children of four years of age do not discriminate between social and anti-social forms of activity. The predominant effect of parents on the socialization of the preschool child is to raise or lower his ability to behave actively toward the environment (whether to express hostility or more socially motivated behavior). However, from three other investigators, Anderson (1,2), Chittenden (10), and Mummery (32, 33, 34), we have considerable evidence that when a measure which makes qualitative distinctions in assertiveness is employed, we get differences between children, and behavior which is preponderantly acceptable as young as three years of age. While Chittenden obtains higher scores for Domination than for Cooperation in a situation in which there is only one toy to be had, she shows that this balance can be changed by teaching devised (a) to help the child interpret situations from the other child's point of view, and (b) to help him work out solutions in line with that interpretation. These three-, four-, and five-year-old children apparently did learn to discriminate between social and anti-social activity. One would therefore expect that the home environment could be a determining factor in the social acceptability of a child's ascendant behavior.

In his conclusions, Baldwin (7) states that freedom and permissiveness allow the child to become outgoing and spontaneous, but interaction (the parents' outgoingness and warmth) actively encourages and pushes him into social interaction. Because "warmth" seems hardly synonymous with "General Activity Level," the writer cannot see how these conclusions stem

from the findings. Nevertheless, they suggest a possible relationship between assertiveness and home factors of warmth and responsiveness.

In a later paper, Baldwin (8) relates combinations of high or low amounts of the three syndromes of Warmth, Democracy, and Indulgence to a battery of 45 child behavior variables more similar to the different methods of ascendance than those used in the previous study (31 and 8, p. 58). His findings indicate that the significant effects of Democracy, by far the most important of the three factors, seem to reflect three general sorts of consequences: (a) more active, socially outgoing behavior of both the hostile and domineering and the friendly kinds; (b) more success in aggression and bossing; and (c) more curiosity, originality and constructiveness. These results suggest even more strongly that ascendant children probably come from democratic homes.

What is it about a democratic home which produces these effects? As Baldwin says, democratic parents encourage free exploration and experimentation and thus provide intellectual stimulation. By definition, these democratic homes were permissive and freedom-giving, explained reasons for regulations, allowed the child to participate in family policies, and answered his questions, which in turn encouraged further exploration. Thus, these children have more ideas to contribute to group play and are likely to do more directing and suggesting; i.e., be more ascendant.

The writer would like to suggest that the chief effect of democracy in the home as far as the amount of children's assertiveness is concerned, may well be in influencing the child's concept of himself—his feelings about himself. Logically, it would seem that the democratic attitudes and practices which he experiences would add up to more confidence in himself, which in turn might be the chief determinant of his assertiveness. In a democratic home the child's wishes and opinions are listened to and considered; his needs for knowledge and exploration are met; he is treated as a reasonable and reasoning individual. Because he is shown more respect, he develops more self-respect as a reflection of the adults' attitude toward him. His greater fund of information, ideas, and skills also give him an advantage which will be reflected in his attitude toward himself and toward his peers. Having some part in family decisions and practice in talking over and solving situations within the family give him confidence and teach him to face rather than to withdraw from personal differences. Jack's conclusion that self-confidence is related to ascendance (21), gives some support to this viewpoint that democracy increases self-confidence. As a result of her hypothesis based on observations in the nursery school, she trained nonascendant children in the acquisition of certain skills such as putting puzzles together and then gave them an opportunity to play with these puzzles and other toys, together with children unfamiliar with them. When these trained children were re-tested for ascendance, their scores had greatly increased. Thus, it might be expected that assertive children would come from homes

which give them self-confidence, and democratic homes would seem to do just that. It is interesting to note in this connection that the Fels' data show a relationship between Democracy in the home and small muscle skill (8).

Two other characteristics of democratic homes mentioned by Baldwin may be related to assertiveness; namely, high intelligence level and the fact that they are more likely to send children to nursery school (6 and 8, p. 59).

Studies of Father-Child Relationships

Generally speaking studies have been in terms of mother-child relationships, in spite of the significant effect the father appears to have on aggressive behavior. Sears' findings indicate that the father contributes heavily to sex-typing of *boys* in the preschool years in regard to their expression of aggression, for his absence leads to a reduction in frequency of such actions in doll play (39). "The father is nearly always a model and his masculine characteristics ordinarily seem to include greater aggressiveness and greater tolerance for the social expression of aggression than do the feminine characteristics of the woman." (cf. Mead 29) Although there is very little overlap of aggression with unacceptable ascendance, Sears' findings suggest that investigations of family background could well be in terms of (*a*) the differential effects on boys and girls; and (*b*) the father's role in relation to personality development as well as the mother's. Reasons for this suggestion are the following indications from Sears' study:

1. That the father is a more aggressive model than the mother.
2. That the father is more tolerant of the social expression of aggression.
3. That the father exercises more rigid control over the boy, the mother over the girl.

Socio-Economic and Cultural Factors

The children in Sears' study were those of working mothers and were enrolled in War-time Day Care Centers. They were upper-lower and lower-middle class families. Would the same trends be found in upper socio-economic homes? The work of Davis indicates that forceful direct methods are approved and rewarded types of ascendance among lower-class families as compared with middle-class families (12). A recent study by Stott and Mummery (35) indicates that, among highly educated upper socio-economic families, such forceful behavior is not considered acceptable as judged by ratings of either mothers or fathers. Further support for the advisability of an analysis in terms of class differences is given by Duvall (13). She concluded that a "good" parent and a "good" child vary with a scale of four levels of social class regardless of whether the parents are Jewish, Gentile, Negro or White. Ericson and Davis also have shown that middle-class (White and Negro) parents place children under a stricter regime with more frustration of their impulses than do lower-class parents (14). The

findings of Stott in a number of studies suggest that comparisons should be made between rural and urban homes. He found differences in parent-child relationships and in child adjustment in city, small-town and farm homes; e.g., the three types of homes varied in strictness of discipline, and the children varied in traits involving personal adequacy. One aspect of child development in which the farm home setting seemed at a disadvantage was that of social relationships (40). In the light of the known relationships of social behavior to parental control, studies of the dynamics of ascendant behavior should take into account the possibility of class and cultural differences.

Under What Home Conditions Do Children Learn Methods that Are Considerate?

The studies reviewed so far have had little to offer by way of a description of the family backgrounds of children who use acceptable as compared with unacceptable methods of assertion. There is almost no research to show how respect for personality develops or how assertive methods which show consideration are learned. However, we do have some evidence that preschool children do show considerateness and, indirectly, that in our culture they are developing some of the social sensitiveness basic to the sharing, cooperative types of behavior which, by definition, are acceptable in a democracy (1, 10, 17, 18, 22, 32, 33, 34, 37). But none of these studies relate considerate types of ascendance to home background.

Findings of Studies on Family Relationships Pertinent to Learning Considerateness

"Studies of the relation of parent-child and parent-parent relationships to child behavior indicate that, in general, the child who comes from a home atmosphere where such relationships are happy and wholesome is more likely to be cooperative and socially well adjusted in his own age group than the child whose home life is fraught with tensions between him and his parents and between his parents." (11, p. 183; 9, 16, 45) In a recent study of home backgrounds of well adjusted children, Langdon and Stout conclude that the factor which distinguishes these homes more than any other is the factor of love (24, 25). They say: "The attitudes toward the child seemingly become, then, for these 158 children, the explanatory factor—love and affection, being wanted, being appreciated, trusted, being accepted as a person, being looked upon with respect as an individual." (24, p. 459) These conclusions corroborate the earlier results of Stott (41) that homes in which there is affection, confidence and companionability are favorable to good adjustment. The findings of Radke (38) on the relationship of children's behavior to discipline add weight to a hypothesis that the methods a child uses are directly related to the guidance and control he receives. Radke

found the following significant relationships between ratings of the behavior of four- and five-year-old children and home atmosphere:

1. In favor of democratic vs. autocratic atmosphere in getting along with others, considerateness, and emotional stability.

2. In favor of freedom-giving vs. restrictive disciplinary atmosphere in rivalry, popularity, and colorfulness.

3. In favor of mild vs. severe punishment atmosphere in talkativeness, rivalry, affection, considerateness and sensitivity.

An unpublished Master's thesis by Trumbo (44) obtained correlations between the Fels' Parent Behavior Scales and the ratio of Domination to Cooperation. She found that a proportionately high amount of Domination was positively related to disciplinary friction, discord in the home, restrictiveness of regulations and coerciveness of suggestion; and negatively related to effectiveness of policy, rapport with child, understanding of children's problems, readiness of criticism, democracy of policy, readiness of explanation, intensity of contact, acceptance of the child, clarity of policy, justification of policy, and emotionality toward child. These studies, contrary to Baldwin's results, agree on a relationship between (a) a democratic home atmosphere with respect for the individual and considerate, cooperative behavior; and (b) an autocratic climate with coerciveness and severe punishment and dominative behavior. They also show considerable agreement as to the relationship (a) of affection, companionship, rapport, confidence and acceptance to cooperativeness; and (b) of discord in the home to uncooperativeness. The foregoing summary assumes that domination is the opposite of considerate and cooperative behavior.

A paper by Harris (19) on the socialization of delinquent boys states that they seem to differ from non-delinquents in several aspects of the parent-child relationship. In the case of the delinquents, there is a lack of closeness of family ties, less interaction, less warmth and affection, less supervision and restraint, less identification with parents and more indifference on the part of the parents. In general, these conclusions tie in with the findings for well adjusted children in the emphasis on the necessity of affection, rapport and a feeling of belongingness. The apparent conflict in results as to the effect of strictness of control upon the social acceptability of assertive behavior may be only a matter of definition of restraint and restrictiveness. At the same time it suggests that the relationship of control to acceptable-unacceptable assertiveness may not be a simple linear one.

Studies of School and Club Environments

Studies of school and club environments indicate the following factors as favorable to sympathetic, friendly, cooperative responses: (a) a nursery school teacher who is noticeably spontaneous, warm and responsive to

children (37, Murphy); (*b*) a nursery school or elementary teacher and other children whose behavior toward the child is integrative rather than dominative (1, 2, 4, Anderson); and (*c*) a democratic rather than autocratic club atmosphere (28, Lippitt). In these three studies the effect could be due either to the model the adult gives the child, or to a sense of security which made possible socially oriented responses instead of protective ones.

Are the Child's Feelings Toward Himself Related to Acceptable Ascendance?

Murphy, in attempting to account for the great variation in an individual child's sympathetic responses, gives us a lead as to where to look for significant relationships to acceptable ascendance. She says: "The relation between the child's ego-status in the situation at the moment and his long-time drives appears to be the most important factor influencing variations in the child's behavior from one situation to another. . . . insecurity makes either for egocentric, defensive behavior or for a specious solicitude which is no more desirable than the defensiveness. 'Training' in social behavior at any age level is not likely to be sound when it is imposed upon the foundation of an insecure personality." (37, p. 188) In other words, a child's attitudes toward himself are important undergirdings to social behavior which may influence his capacity for (*a*) sensitiveness to and concern for others, and (*b*) training in socially acceptable behavior. Further support for this theory is given by three other investigators. Anderson (1) submits data to back up his theory that Domination is the response of an insecure person who is afraid of change and must defend the status quo; whereas Integration is the response of a free, secure person, flexible, yielding, unafraid of change, and thus capable of finding new purposes through seeing the other person's point of view. In a study by the writer (32), non-ascendant children given training in certain skills to increase self-confidence. During the pairings with untrained children in which the training toys were used, these trained children exhibited behavior which was predominantly of a helping, sharing, "showing and telling how to do it" variety. The children who *knew how* were adequate to, and secure in the situation. They had no necessity to defend their own insecurities, and were thus free to get out of and beyond themselves and their problems and think of others. Being in a secure position, these children could use the acceptable social techniques they already knew. Tension is reduced with increased security, so it would be logical to expect more acceptable, less emotional, destructive, and resistant behavior. Futhermore, it is probable that a secure child is free from tensions which drain off his energies and is thus emotionally ready to learn more acceptable methods. Additional experimental evidence in support of this hypothesis that security is an important factor in the type of assertiveness manifested by children is given in the studies of Lippitt and others (27, 28) on the influence of democratic and authoritarian group atmospheres on the behavior of ten-year-old boys organized into clubs of five members each.

"Resistance, expressions of hostility, demands for attention, competition, and hostile criticism were twice as frequent in the 'autocratic' as in the 'democratic' group. The chief difference in the group atmospheres was in the attempts of the leaders to create feelings of belonging to the group. The autocratic leader made all the decisions and rules and treated the boys in a somewhat impersonal manner, while the democratic leader established man-to-man relationships with the club members." (11) Earlier it was stated that security may be related to the *amount* of assertiveness. The studies just mentioned suggest that an environment which increases a child's security and adequacy may be related also to the *quality* of assertiveness.

Children's Experiences and Guidance in the Home

It would seem that the home should provide experiences and guidance as well as a climate favorable to assertiveness and socially integrative behavior. Jack, Page and Mummery demonstrated an experimental technique whereby ascendant behavior can be increased, assumedly by helping children develop a sense of adequacy and self-confidence in peer relations. The method consisted of teaching non-ascendant children to be proficient in certain verbal and small muscle activities (e.g. to tell a story, and to put together puzzles of various sorts) and then allowing them to use these skills when paired with children who had not been trained. Their greater skill was apparent to both trained and untrained children, and along with it seemed to come an increase in self-confidence as evidenced by increased ascendance. Thus, giving a child definite training in skills puts him in a more favorable position in his group than the one he previously occupied, and apparently frees his assertive tendencies. As shown by Mummery (32) this type of training did not affect the quality of the methods used by these children. However, such training might give them the emotional readiness to benefit from guidance specifically designed to improve assertive methods. In an experimental set-up in which dolls were faced with social situations similar to those occurring in nursery school, Chittenden (10) was successful in modifying the quality of children's assertive behavior in the direction of less forceful types through teaching ways in which toys could be shared so both children would have a good time. No studies known to the writer are designed to measure the effect of direct teaching in the home on the quality or quantity of children's assertiveness. But experiences similar to these two experimental techniques might be equally effective in the home. Do parents avail themselves of opportunities to influence children's ascendant methods? Casual observation suggests that perhaps too often we interpret conflicts over possessions in terms of rights instead of helping children to find solutions which would be integrative in purpose (such as using toys together, sharing activities, etc.). It would seem that practices showing so little consideration for others' interests as the rule "It belongs to the one who had it first" would not lead to good human relations.

A home which is truly democratic, in the opinion of the writer, gives children many shared experiences such as planning, working and playing together, adults and children. Disagreements which arise between family members are resolved through a process of consideration and weighing of the needs and desires of all individuals. This fosters understanding of developmental needs of persons of different ages and dissimilar interests. Children thus have (*a*) opportunity to learn to see another's point of view and develop a willingness to work out mutually satisfying solutions, and (*b*) experience in the democratic methods of discussion, compromise and cooperation. Such experiences in mutual sharing and cooperation could be expected to nurture an attitude of "our-ness" and "we-ness" instead of "mine" and "thine" and a feeling of responsibility for the welfare of the other person and the group as a whole. In Lippitt's study (28), the boys and the leaders planned together. In the training program to increase the self-confidence of non-ascendant children (32), the adult not only taught skills; it was an experience in which she shared with the child her greater knowledge and skill, showing how, telling, praising, supporting. In each of these studies, the children were given a model of socially acceptable methods which may have had direct bearing on the behavior later observed in them. It would seem that future studies of family backgrounds should include factors such as the example supplied by the parent, experiences in democratic living, and direct guidance of social contacts. Further, they should investigate the effects of sibling relationships and placement in the family. Brothers and sisters could well influence a child's assertiveness as a result of the kind of disciplinary control they provide, and their effect upon the child's developing ego.

SUMMARY

This paper presents a review of the literature to obtain leads as to the family backgrounds of ascendant and non-ascendant children which in turn could constitute the hypotheses of future investigations. Because it has been necessary to go to studies which investigated several personality traits similar to ascendance, the term *assertive behavior* is used as more inclusive. Answers to four questions are needed:

1. What types of homes make for assertive children?
2. What types of homes make for unassertive children?
3. What types of homes make for socially acceptable assertiveness?
4. What types of homes make for socially unacceptable assertiveness?

The somewhat confused findings of research emphasize the need for clarification of definitions of both home factors and personality traits in qualitative as well as quantitative terms. Nevertheless, there is rather marked agreement among studies that the extent and quality of democracy and control in the home may be important factors in both the amount of

ascendant behavior and the acceptability of the child's methods. Another factor suggested by the findings of several researches as probably favorable to both the quantity and quality of assertiveness is a warm, friendly, helpful, responsive parent-child relationship which satisfies a child's need for information.

Indications are that high amounts of assertiveness would be related to a home which is permissive and freedom-giving, which encourages exploration and experimentation, which answers a child's questions, assists him in acquiring skills, explains reasons for regulations, allows the child to participate in family policies, allows considerable independence of decision, respects the child's rights and opinions, and is not inclined to shield him from normal risks and responsibilities.

As to the acceptability of the child's assertiveness, there is considerable agreement among studies of parent-child and teacher-child relationships on the following points:

1. That rapport, confidence, trust, affection, companionship, acceptance, feelings of belonging, a sense of adequacy, skills, happy relationships among family members and a democratic, non-restrictive type of control with respect for the individual are related to cooperative, considerate behavior which by definition would be acceptable.

2. That discord in the home, coerciveness, severe punishment and autocratic discipline are positively related to dominative, forceful types of behavior which by definition would be unacceptable. As regards democracy, these conclusions are somewhat contradictory to those of the Fels' studies.

Other factors worthy of investigation in connection with acceptability are:

1. The parents' attitudes regarding the acceptability of children's ascendant methods.

2. The model supplied by the parents.

3. The quality of the guidance a child receives as regards his peer relationships.

4. The child's first-hand experiences in participating in democratic attitudes and practices in his daily home living; e.g., experience in planning together, in seeing others' points of view and in working out mutually satisfying solutions.

The suggestion is made that a child's sense of security and adequacy may underlie his capacity for assertiveness and for methods which show concern for others. The chief effect of the foregoing environmental atmospheres and practices may be in increasing the child's self-confidence and security which in turn may be the chief determinant of both the amount of assertiveness and the quality of his methods. Analyses in terms of rural and urban backgrounds, socio-economic and cultural values, in terms of sex, in terms of father-child and sibling relationships are all suggested. Finally, the opinion is expressed that, with definitions making qualitative distinctions,

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a democracy in the home which includes a type of guidance and control that nurtures consideration for others and channels behavior in socially acceptable ways will be found to be related to socially acceptable assertiveness.

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